

ANNUAL REPORT 2025

A TERI SAS & IPCA Initiative



VICE CHANCELLOR'S MESSAGE



PROF. SUMAN K DHAR

Vice Chancellor
TERI School of Advanced Studies

I am pleased to place on record my deep appreciation for the IPCA Centre for Waste Management and Research (ICWMR) at TERI School of Advanced Studies (TERI SAS) for its excellent contributions during the year. ICWMR has emerged as a vital pillar in advancing the mission and vision of TERI SAS through its interdisciplinary research, policy engagement, capacity-building initiatives with societal impact and industry collaborations. The Centre has played a pivotal role in addressing pressing environmental challenges related to waste reduction, resource recovery, circular economy, and environmental governance. The Centre's efforts in bridging science, policy, and practice have contributed meaningfully to national and regional sustainability goals, while also supporting evidence-based decision-making.

Its work reflects our shared resolve to contribute to sustainable development, environmental stewardship, and societal well-being.

ICWMR's commitment to nurturing young professionals, fostering inclusive stakeholder engagement, and promoting climate-resilient and equitable water governance aligns strongly with the values of TERI SAS.

I appreciate the efforts and continued support of IPCA Management and colleagues at ICWMR.

I encourage the Centre to further enhance innovation, broaden the scope of its services, and play an increasingly significant role in advancing the mission and vision of TERI SAS in the years ahead.

Best Wishes,

A handwritten signature in black ink, appearing to read 'S Dhar'.

Prof. Suman K Dhar
Vice Chancellor, TERI SAS

PATRON'S MESSAGE



ASHISH JAIN

Founder Director
Indian Pollution Control Association

I am pleased to acknowledge the progress of ICWMR. In three years of its tenure, the Centre has achieved several milestones and met the objectives of its existence. The Centre was established with the objective to bridge the skill, knowledge and technical gaps in the realm of waste management and under the excellent leadership of Prof. Kansal, Director, ICWMR has done justice to its objectives.

Through rigorous studies, training and capacity building initiatives, and meaningful industry and government collaborations, the Centre continues to shape evidence-based decision making and policy discourse in the waste management sector and create future leaders.

I applaud the dedication and excellence demonstrated by the Centre's researchers, trainers, partners and all stakeholders who have contributed to the work highlighted in this report.

As a parent organisation, IPCA remains proud to support ICWMR's journey. I am confident that the Centre will continue to expand its reach, deepen its impact, and remain dedicated to knowledge creation and dissemination.

I wish all the very best to the entire team of ICWMR for keep doing great work for the benefit of society.

Best Wishes,

A handwritten signature in black ink that reads "Ashish Jain". The signature is stylized and cursive.

Ashish Jain
Founder Director, IPCA

DIRECTOR'S MESSAGE



PROF. ARUN KANSAL

Director
ICWMR

I am excited to present the annual report of the IPCA Centre for Waste Management and Research (ICWMR) for the year 2025. This year highlights our dedication to making a meaningful impact through research, capacity building, and collaborative efforts in waste management, water sustainability, and the circular economy.

Since its founding in 2022, ICWMR has established itself as a valuable partner to businesses, universities, and communities, focusing on bridging gaps in policy, knowledge, and skills while promoting innovation and sustainability. The year 2025 has seen significant projects and strategic partnerships, including our new presence in the USA (with the help of IPCA) and engagement with industries and the government in Kerala. As the geopolitical situation improves, we anticipate meaningful expansion, reach and progress towards achieving ICWMR's goals and mission.

In the past year, ICWMR has been involved in impactful research and consultancy projects, showcasing our role as a Centre of Excellence. We served as independent consultants to monitor waste management in five zones of Delhi. Our insights improved operations and service delivery, contributing to better urban waste management. In partnership with Bisleri International, we worked to restore four historical water bodies in Rajasthan and Bundelkhand. Our scientific assessments led to restoration plans that respect history while promoting environmental sustainability. We measured the benefits of organic waste management projects for the Swarn Lata Motherson Trust and developed a user-friendly toolkit to estimate net GHG emissions reduction. Our analysis of SBI Cards' initiatives highlighted the social and environmental benefits of plastic recycling.

Through our SkillS series, we trained several professionals in essential areas, including life-cycle assessment. The ICWMR team participated in major community waste management events and shared our expertise at educational forums, reinforcing our leadership in the field. We contributed articles to journals and participated in public discussions, sharing valuable stories from grassroots entrepreneurs we had trained in the past to disseminate practical knowledge.

I am truly heartened to see the dedication that everyone at ICWMR has shown to our core values and strategies. Our commitment to **interdisciplinarity** helped in addressing the

complex challenges of waste, water, and climate. Projects such as water body restoration and the development of carbon toolkits have flourished because we have united our knowledge in hydrogeology, environmental science, policy analysis, and community engagement. It's inspiring to see how our **partnerships** have broadened our impact. By leveraging diverse expertise and resources from our knowledge partners, both institutional and freelance, we have been able to implement projects that truly matter. **Data and technology** played a vital role in our efforts- whether monitoring waste management in Delhi, estimating carbon footprints, or simulating water flows. Effective data collection and technology use are critical not just for informed decision-making but also for maintaining transparency. I believe that building capacity is fundamental in empowering individuals and institutions alike. The ICWMR team is not only enhancing their own skills but also generously sharing their knowledge with others, including mid-career professionals. **Skill development** truly fosters innovation, compliance, and strong leadership. Our commitment to **effective communication** helps bridge the gap between knowledge and action. Through our CAP vertical initiatives- like engaging on social media, sharing important policies, and facilitating dialogues with stakeholders- we have witnessed the strong impact that thoughtful communication can have on shaping behaviour, policy, and practice.

In the coming years, the ICWMR will continue to be a catalyst for sustainable transformation by focusing on **research and tool development** to advance Scope 3 and 4 emissions accounting, ecological and water footprint assessment, and digital tools for real-time sustainability monitoring. These initiatives will support industries and ULBs in meeting national and global standards. We will introduce **innovative skill-based courses** and expand training opportunities to empower youth, professionals, and policymakers. Additionally, we aim to establish **meaningful partnerships** that strengthen connections between research and practice through collaboration with international networks, industry consortia, and grassroots organisations. Significantly, our efforts will culminate in the **International Recycling Incubation Summit (IRIS) 2026**, which will be held at the India Habitat Centre in New Delhi in January 2026. We will also enhance our presence on YouTube to reach a wider audience and raise awareness about these important issues.

None of our achievements would have been possible without the resolute dedication of the ICWMR team, the guidance of our advisory committee, the support of our patrons - TERI SAS and IPCA, and the trust of our partners and stakeholders. I extend my sincere gratitude to each of you for believing in our mission and contributing to our collective journey. I am optimistically excited about what the future holds for us!

Wishing everyone a sustainably prosperous New Year 2026.



Prof. Arun Kansal
Director, ICWMR

ABOUT ICWMR

IPCA Centre for Waste Management and Research (ICWMR) was established in 2022 as a Centre of Excellence at TERI School of Advanced Studies in collaboration with Indian Pollution Control Association (IPCA). Since its inception, the Centre has focused on creating a neutral and knowledge-driven platform that supports government agencies, urban local bodies, industries, academia, researchers, innovators and civil society to address policy, knowledge and skill gaps in the sustainable waste and resource management domain.

In addition to the expertise of its staff, the Centre benefits from the collective knowledge and experience of faculty and experts from TERI SAS, researchers from TERI, and practitioners.

ICWMR VERTICALS

ASSESS

Assessment & Simulation of Suitable Environment Strategies for Sustainability

STRIDE

Sustainable Trade & Resilient Industrial Development with Environment

SKILLS

Skilling Learning & Leveraging for Sustainability

CAP

Communication, Archiving & Promotion

OUR CORE AREAS

- Data-driven research that facilitates decision-making
- Ecological, water and carbon footprint assessment
- Water resources and waste management
- Policy research and advocacy
- Carbon finance
- Environment auditing
- Consultancy services for audit, BRSR, green credit, and other regulatory reporting
- Consultancy for nature-based solutions
- Social and environmental impact assessment
- Training and capacity building

Three Years of Impact

Driving sustainable change through research, training, and innovation

30+

Research
Projects

2k+

Trained
Professionals

20+

Publications

5L+

Social Media
Reach

OUR TEAM

Prof. Arun Kansal

Director

Expertise: Urban environment management, Water and used water management, Treatment technologies, Sanitation, and Solid waste management



Garima Kaushik

Head and Scientist C

Expertise: Waste management, Entrepreneurship development, Policy frameworks on WM, Research, Project management, Stakeholder management



Dr. Atul Kumar

Scientist B

Expertise: Solid waste management, Life cycle assessment, Prediction modelling and socio-economic analysis, Carbon footprint assessment



Dr. Divya Soman

Scientist B

Expertise: Nature-based solutions, Economic valuation of ecosystem services, Waste management, Environmental accounting, and Green GDP



Priya Gandherva

Manager

Expertise: Administrative Coordination, Stakeholder communication, Documentation, and Social media management



OUR AFFILIATED TEAM



Ashish Jain
Founder Director, IPCA

Expertise in sustainable waste supply chains, plastic recycling, organic waste composting, waste-minimization technologies, community engagement, and EPR



Ajay Garg
Secretary, IPCA

Expertise in crafting operational strategies and developing organizational infrastructure, Developing supply chain of solid waste management, Stakeholder management, and EPR



Dr. Radha Goyal
Deputy Director, IPCA

Expertise in air quality monitoring and management, Decentralized solid waste management systems, stakeholder management, CSR implementation and compliance



Dr. Ranjana R Chaudhuri
Associate Professor & HoD, DoNAS, TERI SAS

Expertise in urban and agricultural water management, Water and wastewater systems, Water audit, water efficiency and budget plans, and statistical modelling of extreme events



Dr. Gopal Sarangi
Associate Professor & HoD, DoPMS, TERI SAS

Expertise in energy market and regulation, Energy, society and public policy, Governance and institutional analysis of energy and environmental interactions

YEAR AT A GLANCE

January

Webinars on Waste, Water and other Environmental Issues

- **Monitoring** of MCD's work of collection, transfer and processing of MSW
- **Panel discussion** on the role of community participation in sustainable waste management
- **International conference** on empowering communities

February

SkiLLS 3.0 - Skilling Learning and Leveraging on Saturdays

March

- **Training of trainers** for empowering changemakers
- **Training** on waste management systems: operations and maintenance- batch III

April

Assessment and restoration of water bodies at four sites in Rajasthan and Bundelkhand region

May

Assessment of social, environmental and economic impact of a plastic recycling CSR project

June

Training on fundamentals and applications of Life Cycle Assessment

July

Estimation of carbon emissions from decentralized organic waste management and development of a carbon assessment toolkit

September

Impact assessment of a waste management project

December

The image features a bold, geometric design. A large yellow shape, resembling a stylized 'L' or a corner, is positioned on the left side. A dark blue rectangle is centered on the page, containing the text 'RESEARCH & CONSULTANCY' in white, serif, all-caps font. The text is arranged in two lines: 'RESEARCH &' on the top line and 'CONSULTANCY' on the bottom line. The overall composition is clean and professional.

**RESEARCH &
CONSULTANCY**

Assessment and restoration of water bodies at four sites maintained by the Archaeological Survey of India

Bisleri International Pvt. Ltd. | April – November 2025

About the Project

The project involved a technical assessment of the water quality and quantity parameters of four traditional water bodies located at the heritage sites maintained by ASI in Rajasthan and Bundelkhand region of India. The primary need was to understand the hydrology of these historical structures—how water enters, exits, and interacts with the surrounding soil and geology.



Many structures had lost their natural inflow mechanisms over time, so a scientific analysis was critical to revive functionality. We carried out hydrogeological surveys, water quality testing, soil analysis, structural mapping, catchment studies, and assessments of seepage pathways. This helped us develop a clear, site-specific restoration plan.

Project Sites

● Neemrana Baori

● Chand Baori

● Rani and Padma Taal

● Buddha-Buddhi Talab

Heritage water systems were originally engineered with deep environmental wisdom. However, decades of neglect and altered catchments have disrupted their functioning. Scientific interventions help us diagnose issues accurately and restore them without compromising their historical integrity.

We converted scientific findings into actionable interventions—such as redesigning inflow channels, improving water recharge zones, and introducing an environmentally safe treatment process. This ensures Bisleri’s conservation efforts are not temporary but designed for long-term sustainability.



Monitoring of the main work of private partnership project for collection, transportation, treatment & disposal of municipal solid waste in designated zones of MCD

MCD & DMSWSL | January 2025 – June 2025

About the Project

The project involved monitoring the work of Public-Private Partnership (PPP) between the Municipal Corporation of Delhi (MCD) and M/s Delhi Municipal Solid Waste Solutions Ltd. (DMSWSL) as an Independent Consultant.



SITES MONITORED

59

Wards

98

FCTS

193

Dhalaos/open sites/bins

355

Primary collection vehicles

75

Secondary transportation vehicles

MONITORING ACTIVITIES

- Waste collection
- Waste Transportation
- Waste storage
- IEC activities
- Landfill Management
- Composting
- Vehicle and facilities maintenance
- Waste to Energy Plant

- The project introduced a **scientifically designed sampling methodology** to evaluate daily and monthly performance.
- The project developed a **daily evaluation matrix** with sub-indicators, real-time tracking, and quantifiable scoring for the operational activities.

5

ZONES MONITORED

Rohini | Keshavpuram | Narela | Civil Lines | City SP

Assessment of Social, Environmental and Economic Impact of a Waste Management Project

SBI Cards and Payment Services Ltd. | April – June 2025

About the Project

This project assessed the social, environmental, and economic impacts of SBI Card’s MASS initiative, which sourced and processed plastic waste to make recycled boards. Insights from field surveys and stakeholder consultations highlighted notable improvements in community engagement, behavioral change, and operational efficiency, alongside positive environmental outcomes such as decreased mixed waste, increased recyclables recovery, and lower emissions.



The assessment quantified measurable reductions in GHG emissions, land degradation, fossil fuel use, and health risks, while delivering social benefits. These insights empowered SBI Card to drive impactful CSR initiatives, embed measurable impact metrics, and align closely with ESG and sustainability reporting standards.

Project Sites Delhi NCR and Patiala



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Every step towards responsible waste management is a step towards protecting our environment for future generations.

Dr Atul Kumar, Scientist

— ” —

Estimation of Carbon Emissions from Decentralized Organic Waste Management Project and Development of a Carbon Assessment Toolkit

Swarn Lata Motherson Trust | September- December 2025

About the Project

The project focused on assessing the environmental impacts of the decentralized organic waste management project implemented across multiple Indian cities, under the CSR initiative of the Swarn Lata Motherson Trust (SLMTT).

The study included a comprehensive review of national and international GHG estimation methodologies, followed by the quantification of avoided emissions based on

project activities across cities. As a key project output, a user-friendly Excel-based carbon estimation toolkit, along with templates for Scope 3 accounting, was developed. These tools will support SLMTT and its partners in routine monitoring, reporting, and verification of carbon benefits in future project cycles.



Project Sites

- Delhi NCR
- Mumbai
- Pune
- Kovalam
- Pondicherry
- Aerobin Manufacturing Facility, Chennai



Protecting heritage is not just about conserving monuments but restoring the ecosystems around them. Water bodies are an integral part of India's heritage architecture. When we revive water bodies, we preserve history, support biodiversity, and secure sustainable resources for future generations. It brings life back to the monuments. Environmental action is, in many ways, cultural preservation

Prof Arun Kansal, Director, ICWMR



Impact Assessment of the CSR Project of SBI Cards and Payment Services Limited in Jammu, India

SBI Cards & Payment Services Limited | December 2025- March 2026

About the Project

The project will assess the impact of the 11,000 recycled-plastic benches distributed in schools in three districts of Jammu.

The primary aim of this study is to evaluate the environmental, social, and economic impacts of the project and to examine their contributions to sustainable waste management practices in the region.



Project Sites

● Doda, Jammu

● Udhampur, Jammu

● Kathua, Jammu



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When we protect nature, we protect our future. Every sustainable choice we champion today strengthens the resilience of tomorrow's world.

Dr Divya Soman, Scientist B, ICWMR

— ” —



TRAINING & CAPACITY BUILDING

Webinars on Waste, Water and Other Environmental Issues

Uttarakhand Pollution Control Board | January –February 2025

A series of webinars was organised to build awareness and enhance understanding of critical environmental issues among diverse stakeholders. The following webinars were conducted:

- Becoming an Entrepreneur in the Waste Management Sector
- Basic Environmental Laws and Rules of India
- Battery Waste Management: Extended Producers' Responsibility

100+ participants

Representing UPCB, Urban Local Bodies across the state, educational institutions, corporates, and non-profit organisations.



Continuous training and capacity building efforts will cultivate future leaders who are kind, sensitized, responsible and environmentally driven

Ms Garima Kaushik, Head, ICWMR

SkiLLS – Skilling Learning and Leveraging on Saturdays

January – March 2025

SkiLLS is a series of rigorous, intensive and impact-oriented programme, organised to equip learners with industry-relevant skills in the sustainability and waste management domains.

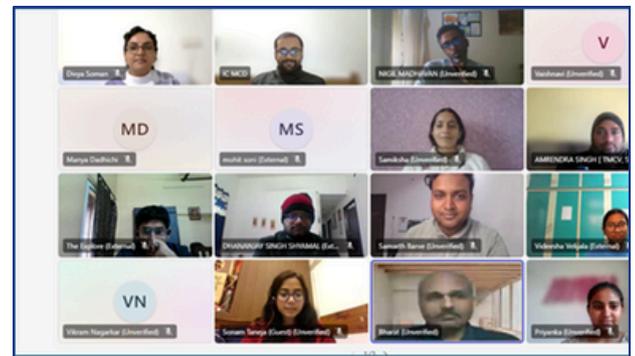
Four sets of training programmes were conducted:

- Fundamentals and application of life cycle assessment
- Estimation of water footprint and neutrality: tools for tracking green products
- Fundamentals and Applications of Life Cycle Assessment
- ESG reporting ecosystem: Frameworks, standards, ratings and disclosures

The training programmes were designed to impart application-based skills relevant to today’s challenging world and are transferred through the online sessions by the experts. The interactive design, hands-on components, and practical assignments enabled participants to gain actionable insights and enhance their professional capabilities.

70+ participants

Representing corporates, NGOs, academic institutions, and consultancy agencies



The training programme’s flow was well-organized, facilitating understanding of the concepts and trainer’s explanations of questions were thorough

Mr S Muralidharan, Consultant

Excellent and knowledgeable trainer and outstanding teaching approach aligning with training objectives

Mr Rajkumar Nanda, Head EHS and Sustainability, Skipper Limited



Training of Trainers for Empowering Changemakers

25 April 2025

Realising the role of RWAs and citizen groups as ambassadors of change and their potential in influencing community behaviour towards waste management, a Training of Trainers programme was organised for selected members.

50+
changemakers

The training provided a basic understanding of waste management, policy frameworks, and processes of waste collection, segregation, processing, etc. The session addressed their queries and clarified misconceptions that they come across while working to compel fellow community members to practice waste segregation, waste minimization and sustainable consumption.



Training on Waste Management Systems: Operations and Maintenance

Ministry of Tourism and Environment, Maldives | 29 April – 2 May 2025

An intensive training programme was organised on waste management systems to provide an in-depth understanding of waste management operations, focusing on sectoral approaches, operational models, on-ground processes, and regulatory compliance related to waste management practices and a field visit to the waste management facilities. Participants engaged in interactive classroom sessions led by experts from the Centre and partner organisations. The exposure visits helped participants gain firsthand insights into operational workflows, technology options, and best practices in sustainable waste management.

14 participants representing Island Councils of Maldives

6 members of Ministry of Tourism and Environment, Maldives

Expert Sessions | Waste management plans | Presentations

**Field visits to MRF, PRF, Mechanized composting site, Vermicomposting site
Behaviour change/ Educational programme**

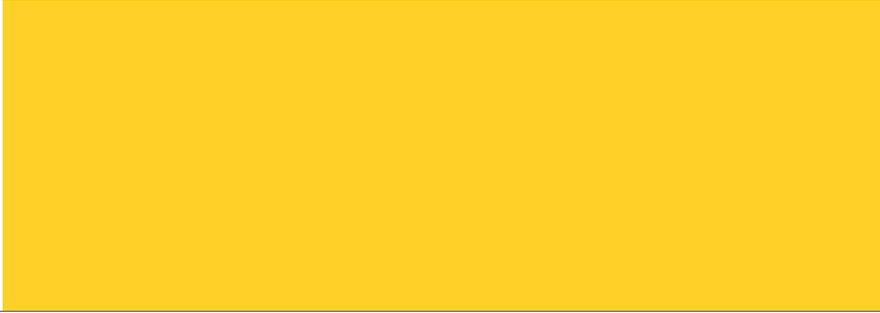


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I would like to extend our sincere thanks to the TERI School for the warm hospitality and excellent support provided throughout the sessions. Let us continue working together to improve the program and achieve the best possible outcomes.

Ms Jumaina Hassan, Project Manager, Maldives Clean Environment Project

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OUTREACH ACTIVITIES

Panel Discussion on 'Role of Community Participation in Sustainable Practices of Waste Management'

IPCA & Dabur India Limited | 17 January 2025

The panel discussion celebrated the transformative impact of community-led initiatives in advancing sustainable practices. The discussions centred around two key themes:

- Empowering communities and entrepreneurs through collective action in waste management
- Corporate partnerships fuelling community-driven waste management and education

The discussion served as an important platform for sharing experiences, fostering collaboration, and enhancing community engagement in sustainable waste management practices.

80+ participants

Representing RWAs across Delhi-NCR, NGOs, citizen groups & sustainability practitioners

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The training was an eye opener. We had so many misconceptions about waste and its management and after the training, we feel very confident in speaking to our fellow community members.

Ms Damini Sharma
Member of a citizen group

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International Conference on Empowering Communities in Launching and Scaling Micro-Enterprises

India Development Services & University of Colorado Colorado Springs (USA) | 22 January 2025

The International Conference was organized to foster entrepreneurship and provide a platform for knowledge sharing. The conference featured engaging panel discussions and an open house for entrepreneurs, where experts addressed key topics including business strategy development, financial management, product and service planning, and the importance of proper documentation for enterprise growth.

Mr. Arpit Sharma, CEO, Skill Council for Green Jobs, Government of India, graced the conference as the Chief Guest, adding valuable insights on skill development and entrepreneurship in the green economy.

50+ participants
11 expert panellists from startups, NGOs, academia, government, and media



Thank you for organising this unique conference. I was hoping that it might be boring like other conferences, but the discussions were engaging and interesting. I am taking back a lot of learning with me and feel that I have mentors to guide me in my journey.

Paramveer Singh, MRF Entrepreneur

The conference was an eye opener. I learnt about communication, marketing and social media engagement from the panellists. I believe these small tips will help in growing my business.

Kusum Devi, Entrepreneur, Tailoring



Release of Policy Document on Advancing and Integrating Waste Management and Health

22 January 2025

In 2024, the Centre organised an International Conference on Solid Waste Management for Good Health and Wellbeing. Based on the conference deliberations, experts' inputs and secondary research, a policy brief titled Advancing and Integrating Waste Management and Health was drafted. The document highlights the strong interlinkages between solid waste management practices and public health outcomes, evaluates existing gaps, and presents policy recommendations to strengthen institutional frameworks, enhance community engagement, and promote health-centric waste management strategies.



Upcoming Summit

International Recycling Incubation Summit (IRIS) 2026

India Habitat Centre, New Delhi | 16-17 January 2026

IRIS is a global event dedicated to addressing the complex challenges of waste management and its vital connections to broader sectoral and sustainability goals. The theme for this year is 'Integrating sustainable waste supply chain logistics and low-carbon pathways for a circular economy'.

It will explore trends, challenges, and innovations in waste management, sustainable supply chains, and low-carbon circular economy solutions. It will bring together diverse stakeholders, including Policymakers, Government officials, Industry leaders, Recyclers, ULBs, NGOs, Academia from national and international universities, and youth, to advance research, dialogue, and collaborative action in the fields of waste management and the circular economy.

Summit Attractions



High Power
Inaugural
Session



Forum for
Corporates and
Industries



Forum for Start-
ups, NGOs and
Civil Society



Media Panel
Discussion



Paper
Presentation by
Researchers



Exhibition

Our Partners



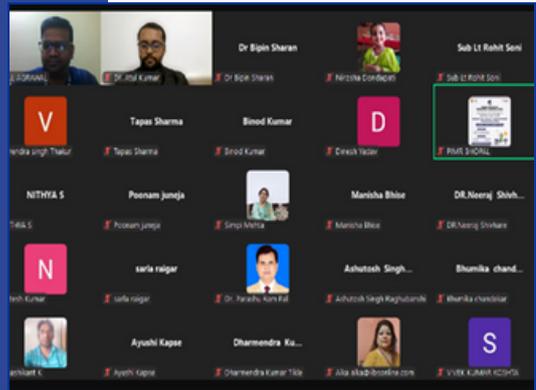


OTHER EXTENSION ACTIVITIES

➤ Dr Atul Kumar was invited as an expert speaker for the ATAL Online Faculty Development Programme hosted by the Prestige Institute of Management & Research, Bhopal. He delivered a session on “Solid Waste Management Techniques” on January 9, 2025.



➤ Ms Garima Kaushik was invited as the Chief Guest for the Prize Distribution Ceremony at Arunodya Public School on January 13, 2025.



➤ Prof Arun Kansal delivered a keynote address on “Water Footprint: A Tool for Climate Resilience and India’s Water Security” at the BRICS Network Universities International Workshop on January 24, 2025.

➤ Prof Arun Kansal graced the Montessori Graduation & Annual Day celebrations as the Chief Guest at Ryan International School, Greater Noida, on February 23, 2025



➤ Prof Arun Kansal participated as an expert in the Water Index for Sustainability, Equity, and Resilience (WISER) roundtable discussion on March 10, 2025.

➤ Prof Arun Kansal delivered a keynote address at the International Conference on Integrating Climate Action, AI, SDGs, and Water Management (ICASW-2025). He also chaired a session on “Technological Advancement, SDGs, and Mitigation Strategies” on March 20, 2025.



➤ Dr Atul Kumar contributed as a participant and sector expert during the Stakeholder Consultation Workshop on GHG emissions from municipal solid waste on March 20, 2025.



➤ Ms Garima Kaushik served as an expert speaker on Plastic Waste Management during an Earth Day event organised by GoSharpener at Gurukul – The School on April 22, 2025.



➤ Dr Atul Kumar delivered a talk on “Plastic Waste: A Global Challenge on Health and the Environment” and participated in a panel discussion on “Sustainability Through the Lens of Three SDGs: Health, Climate Action, and Green Business” on April 22, 2025.

➤ Ms Garima Kaushik conducted a dedicated session on waste management, offering practical insights into sustainability education for a delegation of 50 CBSE school principals who visited TERI SAS on May 22, 2025.



➤ Prof Arun Kansal moderated a thought-provoking panel discussion on ‘Policy Crossroads: finding the right fit between Centralized and Decentralized approaches to Waste Management’ at the National Conference on Transformative approaches for Sustainable solid waste management, organized by the Indian Pollution Control Association on May 30, 2025.



➤ Ms Garima Kaushik conducted an engaging session on Plastic Waste Management during World Environment Day celebrations at NTPC Jhajjar on June 5, 2025.

➤ Ms Garima Kaushik delivered a session titled “Planet vs Plastic: A Call to End Plastic Pollution for a Healthier Earth” during World Environment Day celebrations at PSG Global on June 5, 2025.



➤ Dr Divya Soman attended the official launch of Ocean Centres India, an event that brought together experts to discuss pathways for a safe and sustainable ocean economy at the India Habitat Centre, New Delhi held on July 10, 2025.

➤ Dr Atul Kumar participated in INOPOL’s two-day online training programme on “Strengthening Science-Based Responses to Plastics and POPs Pollution” held on September 9-10, 2025.



➤ Prof Arun Kansal conducted an insightful session titled “Systems Thinking Approach to Sustainability Challenges” for students and faculty at the National Institute of Fashion Technology (NIFT), Panchkula on September 16, 2025



➤ Dr Atul Kumar delivered a special session on “Role of Life Cycle Assessment (LCA) in Environmental Impact Assessment” for postgraduate students enrolled in the Integrated Impact Assessment course at TERI SAS on September 29, 2025



➤ Prof Arun Kansal delivered a guest lecture on “Technologies for Waste Management” for students of the PGDM–Sustainability Management programme at the CCS National Institute of Agricultural Marketing (CCS NIAM) on November 17, 2025.

➤ Ms Garima Kaushik was invited as a Panellist in the panel discussion on ‘Circular Economy of Plastics in India: Assessing Achievements and Challenges’ organized by Development Alternatives on 21 November 2025.



➤ Ms Garima Kaushik and Dr Divya Soman attended the ‘Orientation Programme on Solid Waste Management’ for National Master Trainers, organised by SBM and NIUA on 24–25 November 2025.



➤ Dr Atul Kumar attended the ‘Orientation Programme on Used Water Management’ for National Master Trainers, organised by SBM and NIUA on 26–27 November 2025.

➤ Dr Divya Soman conducted a session for 1st-year MA SDP students at TERI SAS covering the topic “Ecosystem Services and Valuation” on 26th November 2025



➤ Dr. Atul Kumar delivered a session at the XLRI Delhi-NCR campus on “Applications of LCA for Sustainability Assessment: A Practical Guide for Future Managers” on 28 November 2025

➤ Ms Garima Kaushik conducted a training programme on ‘Entrepreneurship in Waste Management’ for students of Sarvodya Vidyalaya under NEEV programme on 6 December 2025.



➤ Ms Garima Kaushik was invited as a speaker in the webinar titled ‘Solid Waste Reduction Strategies’ organized by The Association of Municipalities and Development Authorities (AMDA) on 11 December 2025

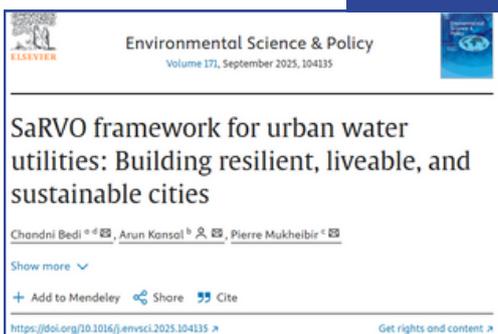
Publications & Blogs

Research Publications



Soman, D., Anitha, V., Viswanath, S., & Sreeraj, M. (2025). From cognition to economic valuation of cultural ecosystem services – Evidence from Parambikulam Tiger Reserve, Kerala. *Journal for Nature Conservation*, 84, 126828.

Link: <https://doi.org/10.1016/j.jnc.2025.126828>



Bedi, C., Kansal, A., & Mukheibir, P. (2025). SaRVO framework for urban water utilities: Building resilient, liveable, and sustainable cities. *Environmental Science & Policy*, 171, 104135. Elsevier (Impact Factor: 5.2).

Link: <https://doi.org/10.1016/j.envsci.2025.104135>



Rao, R., Kansal, A., & Tarannum, F. (2025). Sustainability Assessment Index for Surface Water Bodies for Prioritizing Management Interventions. *Environment and Urbanization ASIA*, 1–16. Sage (Impact Factor: 1.6).

Link: <https://doi.org/10.1177/09754253251337344>



Satija, P.K., Tarannum, F., & Kansal, A. (2025). Specific water consumption in chromite mining and ferrochrome alloy manufacturing – evidence from water audit for reduction strategies. *Indian Journal of Environmental Protection*, 45(6), 546–554.

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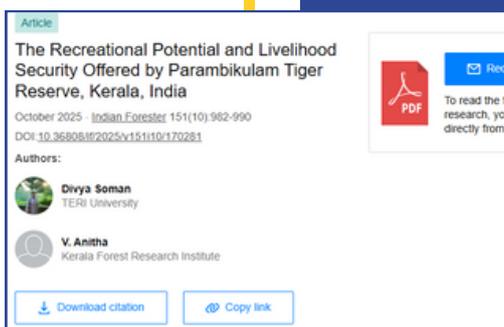
Aryan, Y., Kumar, A., Vanjari, S., Dikshit, A.K., & Shinde, A.M. (2025). Enhancing Sustainability in Municipal Solid Waste Management: An Integrated Approach to Assess Environmental Benefits and Opportunities in India. *Journal of Environmental Engineering, ASCE*, 151(10), 04025066.

Link: <https://ascelibrary.org/doi/10.1061/JOEEDU.EEENG-8136>



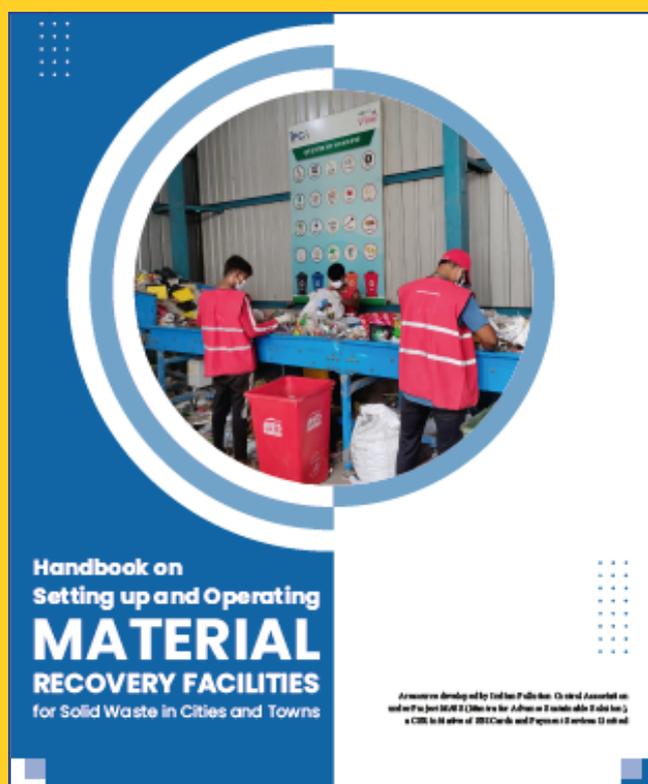
Soman, D. (2025). The Recreational Potential and Livelihood Security Offered by Parambikulam Tiger Reserve, Kerala, India. *Indian Forester*.

Link: <https://shorturl.at/OPknf>



Policy brief on Advancing and Integrating Waste Management and Health

Handbook on setting and operating Material Recovery Facilities for solid waste in cities and towns



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ENVIRONMENT PROTECTION (END-OF-LIFE VEHICLES) RULES, 2025 Another step by India for circular economy

By Ms. Garima Kaushik, Head, ICWMR, TERI SAS



January 6, 2025. The primary aim of these rules is to enable and encourage the formal recycling of waste generated by end-of-life vehicles (ELVs). They also outline the responsibilities of various stakeholders involved in vehicle production, usage, and end-of-life management.

A key aspect of this rules is to promote the establishment of 'Vehicle Scrapping Facilities' and ensure their formal operations. These facilities will process

Blogs & Articles

Kaushik, G. (2025). Environment Protection (End-of-Life Vehicles) Rules, 2025: Another Step by India for Circular Economy. Published in Central Mirror.

Link: <https://icwmr.terisas.ac.in/images/ELVs.pdf>

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NEW PARADIGMS OF WATER SUSTAINABILITY THROUGH MARKET-BASED INSTRUMENTS

By Prof. Arun Kansal, Director, ICWMR, TERI SAS



Anyog published guidelines on water neutrality for Indian industries and proposed a water trading mechanism to encourage the reuse of treated wastewater. In October 2023, the Ministry of Environment, Forest and Climate Change (MoEFCC) announced the Green Credit Rules, followed by the Ecomark Rules in September 2024. While the first three documents explicitly address water efficiency and productivity, the Ecomark Rules implicitly promote water conservation and pollution reduction by production units.

Kansal, A. (2025). Paradigms of Water Sustainability through Market-Based Instruments. Published in Central Mirror.

Link: <https://icwmr.terisas.ac.in/images/new-paradigm.pdf>

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CHANGING PERSPECTIVES ON WASTE MANAGEMENT APPROACH Moving from Health to Wealth and back to Health

By Prof. Arun Kansal, Director, ICWMR, TERI SAS



Plague Commission highlighted the importance of health and sanitation, requiring Medical Officers of Health to hold a diploma in public health. The School of Tropical Medicine was founded in 1920, followed by the All-India Institute of Hygiene and Public Health in 1932.

Rapid urbanization has increased the roles of engineers and architects in managing housing, infrastructure, and urban planning. Government funding has largely

Kansal, A. (2025). Changing Perspectives on Waste Management Approach: Moving from Health to Wealth and Back to Health. Published in Central Mirror.

Link: <https://icwmr.terisas.ac.in/images/changing-perspectives.pdf>

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RIGHTS OF NATURE: A MISSING LINK IN INDIA'S CLIMATE COMMITMENTS

By Dr. Suman Bhatnagar, Director, ICWMR, TERI SAS



The Rights of Nature (RoN) movement in India is still in its nascent stages. It is a movement that seeks to recognize the legal rights of nature entities, such as rivers, forests, and mountains, to exist, thrive, and regenerate. This movement is gaining momentum across the country, with various organizations and individuals working towards its realization.

The RoN movement is based on the principle that nature has an inherent right to exist and thrive, independent of human interests. It is a paradigm shift from the traditional view of nature as a resource to be exploited to a view of nature as a living entity with its own rights and interests.

The RoN movement is gaining momentum across the country, with various organizations and individuals working towards its realization. It is a paradigm shift from the traditional view of nature as a resource to be exploited to a view of nature as a living entity with its own rights and interests.

Soman, D. (2025). Rights of Nature: A Missing Link in India's Climate Commitments. Published in Central Mirror.

Link: https://icwmr.terisas.ac.in/images/Central%20Mirror_Rights%20of%20Nature.pdf

ICPA Centre for Waste Management and Research
ICWMR

CHANGEMAKERS' STORIES

Volume 1

A collection of entrepreneurial journey of participants of Course on Entrepreneurship in Solid Waste Management



Compendium

ICWMR published a compendium documenting the journeys of grassroots entrepreneurs working in sustainability and waste management.

Link: <https://heyzine.com/flip-book/56c35137c6.html>

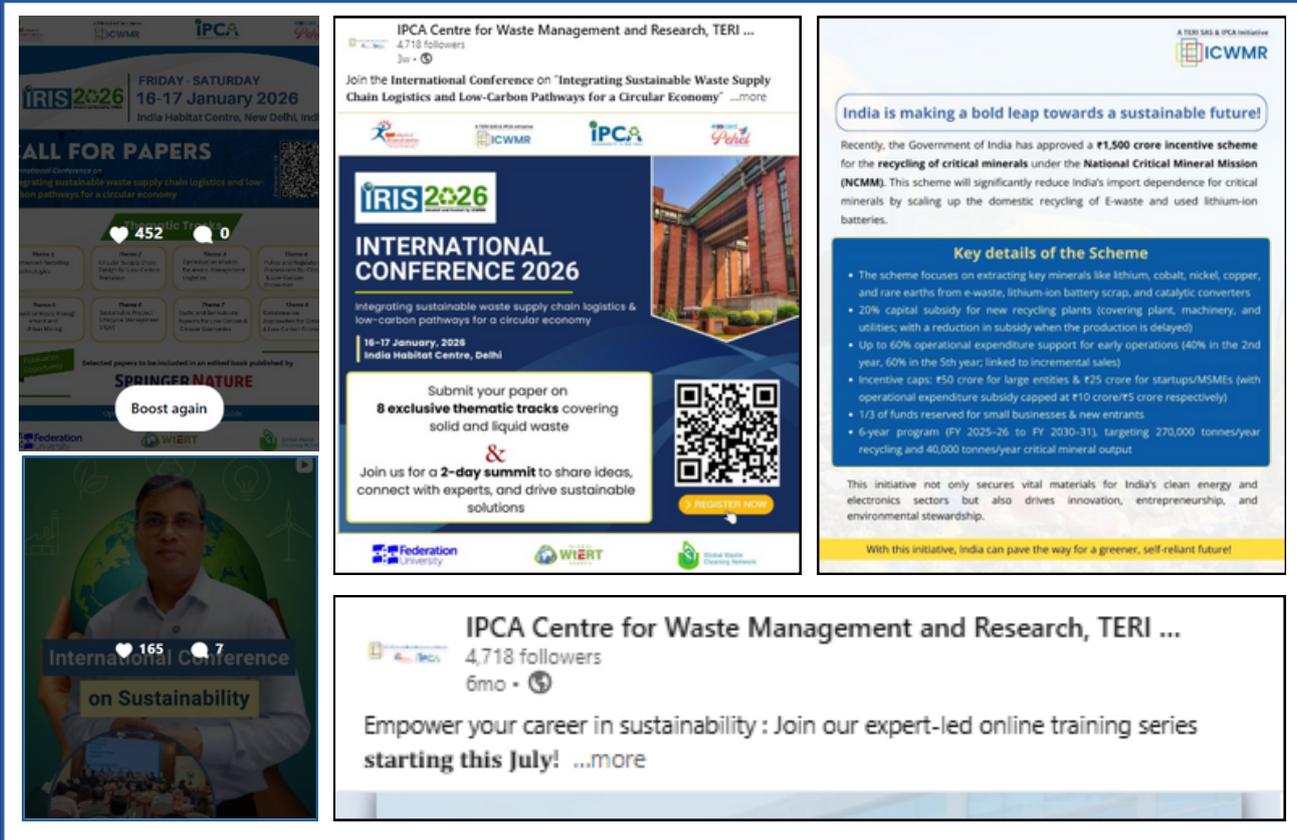
Media Coverage

- Prof. Arun Kansal shared expert views on solutions to address the urban water crisis in a print media feature.
- Prof. Arun Kansal contributed insights on protecting water bodies and the collaborative roles of government and NGOs in a feature published in Dainik Jagran.
- Prof. Arun Kansal was invited on a podcast to speak about sustainability



Social Media

Constant presence in social media with visually appealing and engaging quality content on the recent works has helped in fostering relationships with the industrial and institutional partners and improved our visibility.



Our social media handles



Effective communication and dissemination transform information into impact, enabling communities to adopt responsible solid waste management and build a sustainable future.

Ms Priya Gandherva, Manager



Our Partners

International



Government



Corporates



Implementing partners



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