

ANNUAL MGC Update 2026



*a decade of trust, partnership,
and shared success...*



MD's Desk

The growing challenges of water stress, riverine pollution, marine litter, and emerging contaminants remind us that environmental stewardship is no longer optional; it is a collective responsibility. At Mu Gamma Consultants (MGC), we remain committed to supporting sustainable water resource management through science-driven solutions, innovation, and collaborative partnerships. We continue to work closely with government agencies, industries, research institutions, and communities to address some of the most pressing environmental concerns of our time. From promoting safe reuse of treated water, strengthening river health assessments and pollution mitigation strategies to advancing studies on marine litter and microplastics, our efforts are focused on creating measurable and lasting impact.

As scientific understanding evolves, we believe it is essential to integrate advanced monitoring, data analytics, artificial intelligence (AI) systems and policy support into environmental management frameworks. Our team remains dedicated to contributing knowledge, technical expertise, practical solutions, and policy recommendations that support informed decision-making. Meaningful progress is possible when expertise and purpose come together.

As we move forward, MGC will continue to champion innovation, sustainability, and responsible environmental practices that align with the vision of *Viksit Bharat* and the Sustainable Development Goals.

We are grateful for the trust placed in us by our clients and collaborators, and we look ahead with optimism to expanding our contributions towards pollution-free rivers, cleaner oceans, sustainable ecosystems, and a healthier society. Together, let us continue building solutions for a water-secure and environmentally sustainable future.



Warm regards,
Dr Girija K Bharat
Managing Director, MGC

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In Conversation

Expert Interview: Ms Supriya Sahu, Additional Chief Secretary, Department of Environment, Climate Change and Forests, Government of Tamil Nadu; UNEP Champion of the Earth, 2025



Supriya Sahu

1. Tamil Nadu has been widely recognised for pioneering initiatives such as the “*Manjappai*” campaign against single-use plastics and large-scale awareness efforts on sustainable lifestyles. What were the biggest governance and behavioural challenges in tackling plastic pollution, and what lessons can other states learn from Tamil Nadu’s experience?

Ans. Tamil Nadu’s fight against plastic pollution has shown us that regulation alone is not enough and that the biggest challenge is changing everyday habits. Single-use plastics had become part of daily life, from shopping to packaging. Through the **Manjappai Campaign**, we tried to bring back pride in sustainable traditions rather than treating it only as enforcement. We combined awareness campaigns, school outreach, strict implementation, and support for alternatives. One important lesson is that behavioural change works better when people feel they are part of a movement and not just complying with a rule.

2. Tamil Nadu has taken several initiatives on climate action, biodiversity conservation, and circular economy approaches. Which interventions do you believe have created the most visible impact at the community and city levels?

Ans. Some of the most visible impacts have come from ecosystem restoration and community-linked climate initiatives. Large-scale mangrove restoration, invasive species removal, wetland conservation, and urban greening have directly improved local environments and livelihoods. Programmes like cool roof initiatives in schools and housing colonies have also shown measurable improvements in indoor comfort during extreme heat. At the community level, people respond most strongly when climate action improves daily quality of life; cleaner water bodies, reduced heat, better biodiversity, and livelihood opportunities through eco-restoration.

3. You were honoured with the Champions of the Earth Award by the United Nations Environment

Programme. What does this recognition mean to you personally and professionally, and how has it influenced your vision for environmental governance?

Ans. Receiving the Champions of the Earth Award was both humbling and encouraging. I see it not as an individual recognition but as a recognition for Tamil Nadu’s collective environmental efforts involving government departments, scientists, local communities, young people, and civil society. Professionally, it has strengthened my belief that sub-national governments can lead meaningful climate action. Personally, it has reinforced the responsibility to continue building solutions that are practical, inclusive, and rooted in science.

4. Looking ahead, what are your priorities for strengthening climate resilience and environmental sustainability in Tamil Nadu, especially in the context of increasing heat stress, water scarcity, and urbanisation?

Ans. Going forward, our priority is to strengthen climate resilience in ways that directly protect people and ecosystems. Heat adaptation, water security, restoration of natural ecosystems, sustainable cooling, biodiversity conservation, and climate-resilient urban planning will remain critical areas. Tamil Nadu is also focusing on integrating climate considerations into governance at every level, including districts and cities. The future challenge is not only responding to climate impacts but also preparing communities in advance through planning, awareness, and nature-based solutions.

5. As governments increasingly require evidence-based planning and implementation support for climate and environmental initiatives, what role do you see for research and technical consultancy organisations such as Mu Gamma Consultants in supporting states in areas like plastic waste management, climate resilience, circular economy, and capacity building?

Ans. Research and technical consultancy organisations have an important role in bridging policy, science, and implementation. Climate and environmental challenges are becoming increasingly complex and data driven. Institutions such as **Mu Gamma Consultants** can support governments through evidence-based studies, field assessments, technology support, capacity building, behavioural research, and monitoring systems. Strong partnerships between governments, academic institutions, and technical experts are essential for scaling effective climate and circular economy solutions.



Glimpses from the 10th Year Celebration of MGC





A Decade of Impact – 10 years of MGC

MGC commemorated its **10th Anniversary** on 28th November 2025 at CSOI, New Delhi, marking a significant milestone in its journey towards advancing sustainability and environmental management. The event was attended by eminent dignitaries, including **Mr. Bharat Lal**, Secretary General, National Human Rights Commission, Govt. of India; **Ms. Debashree Mukherjee**, Secretary, Ministry of Skill Development & Entrepreneurship, Govt. of India; **H.E. May-Elin Stener, Ambassador of Norway to India**; **Mr. Rajiv Ranjan Mishra**, Former Director General, National Mission for Clean Ganga; **Dr. Hans Nicolai Adam**, Norwegian Institute for Water Research (NIVA), Norway. In her keynote address, Dr Girija Bharat highlighted MGC's decade-long journey, underscoring its mission, key achievements, and the importance of strategic partnerships. The occasion featured the felicitation of its key collaborators, including GIZ India and the Norwegian Institute for Water Research, as well as recognition of esteemed advisors: Dr Ravi Joseph, Mr Shyam Narayan Dave and Mr K Rajagopal, for their continued guidance. A coffee table book depicting MGC's 10-year journey was also launched by the dignitaries at the event.

The event also marked the strengthening of its institutional partnerships through MoUs with CDD Society and SRM University of Science and Technology, aimed at advancing research, capacity building, and sustainable resource management. A key highlight was the launch of the *Mu Gamma Knowledge & Skills Academy*, an initiative designed to build a future-ready green workforce through innovative, AI-enabled learning platforms. The celebration reflected MGC's strong foundation of partnerships, knowledge exchange, and its continued commitment to driving sustainable development.

Launch of Mu Gamma Knowledge & Skills Academy

Founded by experts with global experience in skills, sustainability, and workforce transformation, Mu Gamma Knowledge and Skills Academy delivers industry-relevant learning solutions for students, professionals, institutions, and enterprises. The Academy combines domain expertise with AI-enabled learning methodologies to offer programmes in ESG, Life Cycle Assessment (LCA), AI adoption, future skills, leadership, and employability enhancement. Its courses are designed to bridge the gap between academic knowledge and workplace expectations through practical, research-driven, and application-oriented learning. With flexible online delivery, expert-led sessions, and globally aligned content, the Academy aims to build future-ready talent for India and international markets.

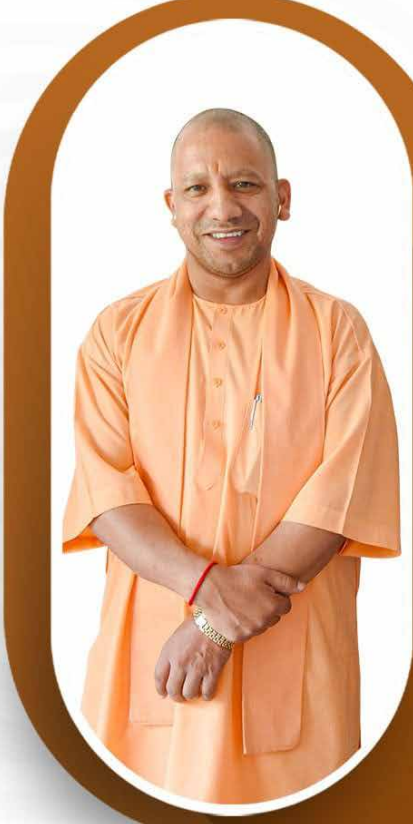

Incorporation of Mu Gamma Consultants, UAE

Mu Gamma Consultants LLC-FZ is a knowledge-driven consulting and R&D firm operating across Environmental Consulting, Educational Technologies, and AI Innovation. Serving clients in the UAE, the wider Middle East, and globally, the firm provides advisory and analytics in water security, wastewater management, ESG, climate adaptation, marine litter, and pollution abatement. Its EdTech and workforce-development solutions leverage AI, psychometrics, and global occupational datasets such as O*NET to enhance employability and productivity. MGC also develops industry-specific AI applications, including ESG monitoring and reporting tools, while supporting responsible AI adoption, applied research, prototyping, and data-driven organisational transformation.







Highlights of the Year

State Policies on Safe Reuse of Treated Water (SRTW) for Uttar Pradesh and Uttarakhand (2026)



**कैबिनेट के महत्वपूर्ण निर्णय
23 मार्च, 2026**

- » Safe Re-use Treated Water नीति को मंजूरी
- » घरों एवं औद्योगिक इकाइयों से उत्सर्जित जल का होगा शोधन
- » सिविल निर्माण, बागवानी, सिंचाई सहित गैर पेय कार्यों में किया जाएगा उपयोग

 Governmentofup  upgovt  UPGovt  UPGovtOfficial

Source: Government of Uttar Pradesh, March 23, 2026

शोधित पानी से सींचेंगे खेत, बचाएंगे पेयजल

उत्तराखंड बना शोधित जल के उपयोग की नीति लागू करने वाला देश का पहला राज्य

धामी कैबिनेट की बैठक

राज्य व्यूरो, जागरण • देहरादून: जल सुरक्षा, पर्यावरण और सतत विकास के उद्देश्य से उत्तराखंड ने महत्वपूर्ण पहल की है। राष्ट्रीय स्वच्छ गंगा मिशन के दिशा-निर्देशों के क्रम में एस्टीपी (सीवेज ट्रीटमेंट प्लांट) और एफएस्टीपी (फैक्टल स्लज ट्रीटमेंट प्लांट) से निकलने वाले शोधित जल के उपयोग के दृष्टिगत सरकार नीति लेकर आई है। धामी कैबिनेट की बुधवार को हुई बैठक में इसकी स्वीकृति दी गई। इसके अलावा उत्तराखंड को उच्च गुणवत्ता वाले शहद व अन्य मीन उत्पादों के अग्रणी राज्य के रूप में स्थापित करने और किसानों की आय में बढ़ोतरी के उद्देश्य से मौनपालन नीति को हरी झंडी दी गई। इसके तहत छह साल में 25,000 किसानों को जोड़ने का लक्ष्य है।

मुख्यमंत्री पुष्कर सिंह धामी की अध्यक्षता में बुधवार को सचिवालय में हुई कैबिनेट की बैठक में 32 प्रस्ताव रखे गए थे, जिन पर स्वीकृति दी गई। रैसर्चिंग में नी मार्च से विधानसभा



- कैबिनेट ने प्रदेश में मौनपालन नीति को भी हरी झंडी, किए कई प्रभावी उपाय
- छह साल में उत्तराखंड के 25 हजार किसानों को शहद उत्पादन से जोड़ा जाएगा

« सीएम पुष्कर सिंह धामी »

1.10 लाख करोड़ होगा बजट का आकार

राज्य के वित्तीय वर्ष 2026-27 के बजट को लेकर भी कैबिनेट में चर्चा हुई। पिछली बार के मुकाबले इस बार नए बजट में 10 प्रतिशत की बढ़ोतरी को स्वीकृति दी गई। इस बार बजट का आकार 1.10 लाख करोड़ के आसपास रहने की संभावना है। वित्तीय वर्ष 2025-26 में बजट का आकार 1,01,175.33 करोड़ था। बजट के आकार में संशोधन के लिए कैबिनेट ने मुख्यमंत्री धामी को अधिकृत किया है। विधानसभा के बजट सत्र में 11 मार्च को बजट पेश होगा।

10 रुपये में मिलेगा 1000 लीटर पानी

एस्टीपी से उपचारित पानी 10 रुपये प्रति हजार लीटर के हिसाब से उपलब्ध कराया जाएगा। प्रथम चरण में एस्टीपी

का बजट सत्र के दृष्टिगत कैबिनेट के निर्णयों की ब्रीफिंग नहीं की गई। कैबिनेट ने विजन-2047 के तहत शहरी व ग्रामीण क्षेत्रों में घरों और व्यावसायिक उद्यमों से निकलने वाले सीवेज (मलजल) का एस्टीपी एवं

से उपचारित पानी टैंकों के माध्यम से दिया जाएगा। द्वितीय चरण में एस्टीपी से पानी ले जाने के लिए नहरों व पाइलाइन का जाल बिछाया। अंतिम चरण में सभी एस्टीपी में और अधिक शोधन संयंत्र स्थापित कर पानी को

एफएस्टीपी में शोधन के बाद मिलने वाले उपचारित जल के उपयोग की नीति पर मुहर लगाई। यह पानी खेतों की सिंचाई, सड़क निर्माण, पार्कों की सिंचाई, सड़कों पर छिड़काव, फायर फाइटिंग, स्टोन क्रशर, भवन समेत

पानी योग्य भी बनाया जाएगा। अभी तक राज्य में संचालित 70 एस्टीपी से प्रतिदिन निकलने वाले लगभग 270 एमपलडी उपचारित पानी पानी को नदियों में छोड़ दिया जाता है।

अन्य निर्माण कार्यों में उपयोग में लाया जाएगा। इससे इन कार्यों के लिए नलकूपों और नदियों पर पानी की निर्भरता कम होगी।

1600 करोड़ से आकार लेंगी नई पेयजल योजनाएं » पेज 9

ये भी महत्वपूर्ण निर्णय

- सेब की अत्याधुनिक नर्सरी विकास योजना को मंजूरी।
- 11 नगर निगमों में एक-एक पर्यावरण अभियंता की सविदा के आधार पर होगी नियुक्ति।
- उत्तराखंड निवेश और आधुनिक संरचना विकास बोर्ड के ढांचे में 13 पदों के सृजन को मंजूरी।
- मुख्यमंत्री उच्च शिक्षा शोध प्रोत्साहन योजना में 21 अशासकीय अनुदानित महाविद्यालयों को शामिल करने का निर्णय।
- उच्च शिक्षा विभाग के अंतर्गत संचालित होगी स्वामी विवेकानंद उत्तराखंड ई-पुस्तकालय योजना
- समान नागरिक संहिता, उत्तराखंड संशोधन विधेयक को प्रख्यापित करने को मंजूरी
- बलात्कार व पाक्सो अधिनियम में लंबित अपराहों के शीघ्र निबटारे को विकासनगर, काशीपुर व नैनीताल में स्थापित होगी फास्ट ट्रेक कोर्ट।

Source: Dainik Jagran, Dehradun, March 17, 2026

In collaboration with the National Mission for Clean Ganga (NMCG), GIZ India, the State Mission for Clean Ganga Uttar Pradesh, and the State Mission for Clean Ganga Uttarakhand, MGC is proud to have supported the development of the **SRTW Policies** for two key states: **Uttarakhand** – released on March 17, 2026 and **Uttar Pradesh** – released on March 23, 2026. These policies represent a major change in water management that serves not just as regulatory frameworks but as strategic blueprints for advancing a circular water economy. A key highlight is the reimagining of Treated Used Water (TUW) as **“Apna Jal,”** transforming wastewater from a disposal challenge into a valuable and reusable resource.

The Policies sets the context, priorities, and direction for the safe reuse of treated water, raises awareness of its importance, and facilitates its implementation through support programs. The Policy also outlines the milestones, reuse targets, pricing and incentive structure for the two states and paves way for circular economy pathway.







Support to Ganga Rejuvenation (SGR)



Phase I

National SRTW
Framework

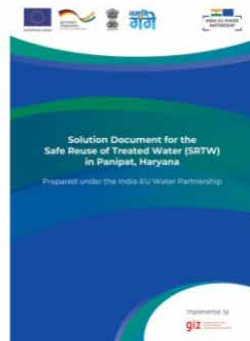
2021-22



Phase II

Solution
Document on
SRTW Business
Model-Panipat

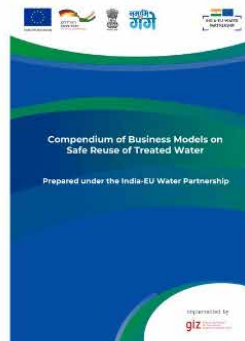
2022-23



Phase II

Compendium of
SRTW Case
studies of India
and EU

2022-23



Phase III

State SRTW Policy
for Uttar Pradesh &
Uttarakhand

2024-26





Projects in Brief

India–Norway Cooperation Project on Capacity Building for Reducing Plastic and Chemical Pollution in India (INOPOL) (2022-2026)

The INOPOL project is a collaborative initiative aimed at addressing the challenges related to plastic waste and Persistent Organic Pollutants (POPs) through science-based, policy-oriented, and capacity-building approaches for Tamil Nadu. The project is implemented under the broader India–Norway Marine Pollution Initiative. This project is supported by the Norwegian Embassy in New Delhi and implemented by the Norwegian Institute for Water Research (NIVA), MGC, CIPET, SRM Institute of Science & Technology and Toxics Link.

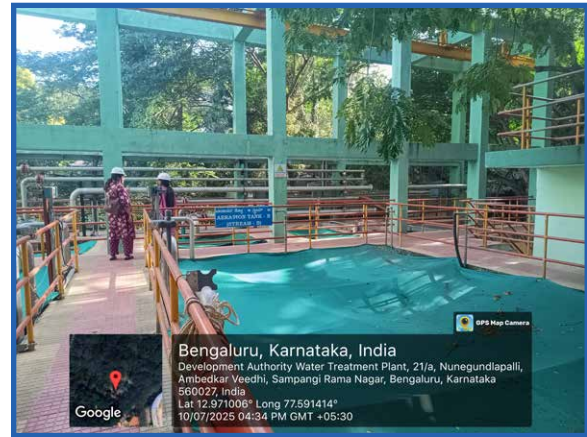
The project has established baseline data on plastic waste and POPs, strengthened monitoring systems, and enhanced data collection frameworks, identified local implementation gaps, supported the effective execution of existing policies, and promoted cross-sectoral collaboration. The study has assessed the load of plastics and POPs pollution on the River

Cauvery and how land-based pollutants end up in the marine environment. Through scientific research, stakeholder engagement, and policy support, the project has provided actionable, evidence-based recommendations to government bodies at both state and national levels. It has contributed to strengthening environmental governance and advancing sustainable solutions to mitigate the adverse impacts of plastic and chemical pollution on ecosystems and human health.

A comprehensive study on decentralized wastewater management systems for India (2025)

The growing challenge of water stress in India necessitates a strong focus on wastewater treatment and reuse, along with building national capacity in this domain. As part of this effort, MGC conducted a national study for the Bureau of Indian Standards (BIS) to understand various aspects of decentralized wastewater management (DWM) systems, also referred to as 'on-site treatment systems' in India.





The study was based on an extensive literature review and stakeholder consultations, including interactions with engineers from the Bengaluru Water Supply and Sewerage Board (BWSSB); Resident Welfare Associations (RWAs); commercial establishments and bulk generators across various cities—Bengaluru, Delhi, Dehradun, Gurugram, Patna, and Coimbatore. As an output of the study, MGC team developed management framework for DWM systems of India.



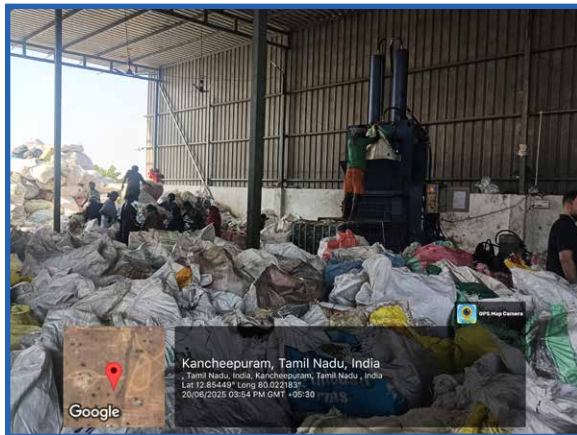
In the subsequent phase, Dr. Girija Bharat, Managing Director, MGC, as co-convenor of the expert committee (EED 04/P6) for the development of Indian Standards on decentralized wastewater management, is actively contributing to the formulation of BIS standards in this area for India.

Multi-scale analysis of the health attributes of plastic recycling in India (MAHAT) (2025-2028)

The MAHAT project is conducting an analysis of the health risks associated with plastic recycling in India, concentrating on at-risk workers in the informal and quasi-formal sectors, as well as residents in proximity to recycling facilities. The primary objective is to examine the public health implications of recycling by analysing the toxic substances released during these processes and identifying societal factors that exacerbate health risks for affected communities.

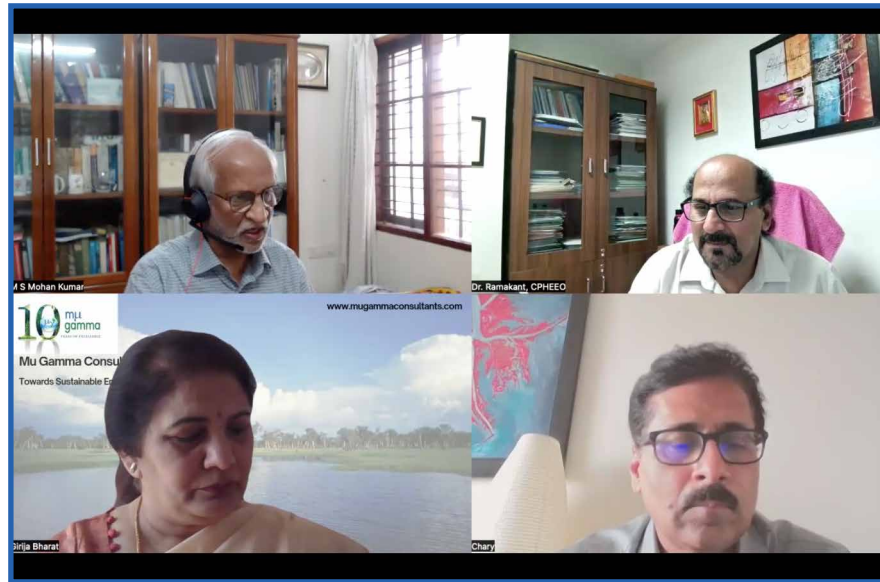
The technical sampling campaign was conducted in April 2026 to assess the environmental and health implications of plastic recycling in India. This joint effort was led by Prof Paromita Chakraborty (SRMIST), Jøran Solnes Skaar (NILU) and Nathaniel Bhakupar Dkhar (MGC). Sampling was done at different facilities and surrounding neighbourhoods of (i) the Plastic Sorting, Scraping and Re-Pelleting Industry (PSSRI); (ii) open dumpsites, including the Kodungaiyur Dumpsite (KDS); (iii) a sorting/baling unit and a shredding unit in Potheri; and (iv) within the SRMIST Campus.

The multidisciplinary team methodically collected air, water, dust and soil samples. Occupational risk evaluated by means of propanol-treated cotton gauze was used to take skin and surface wipes from PSSRI workers and equipment. Air sampling utilised low-flow samplers with polyurethane foam (PUF) filters, which Jøran trained the team to set up alongside SRMIST's high-volume air samplers with PUF filters. The team also collected comprehensive water profiles, including process, ground, wastewater, surface, and stormwater.



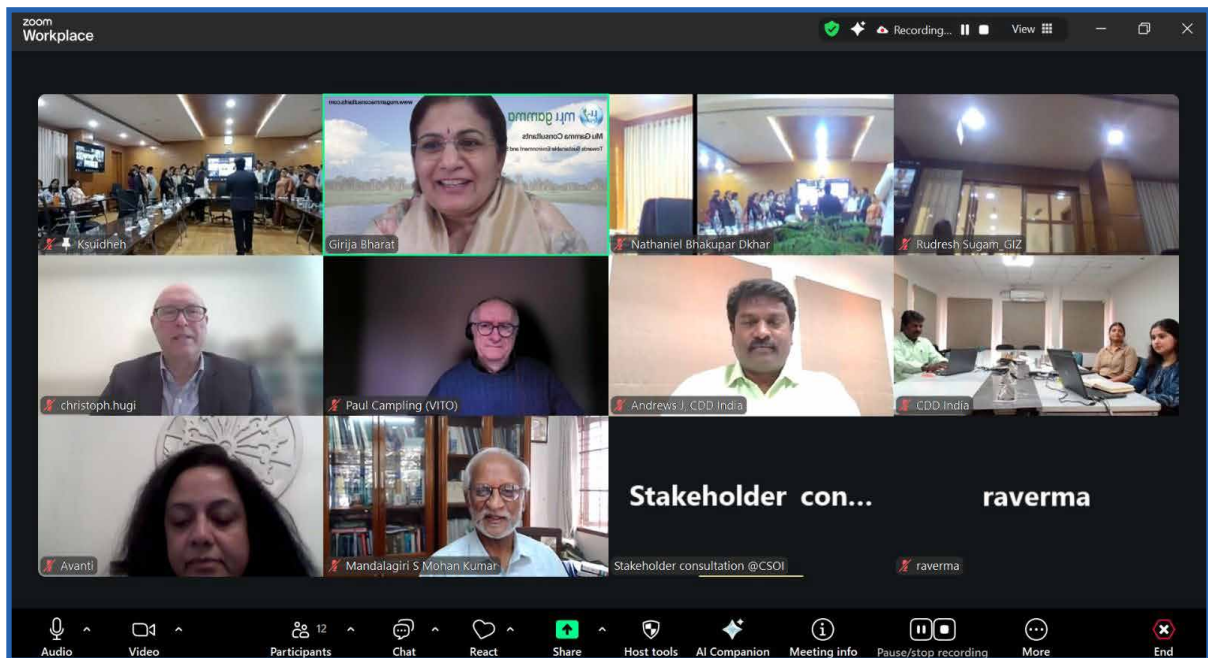
Development of e-modules for dissemination of Water Manual (Drink from Tap) and developing framework for an Urban Water Association (2025-2026)

MGC, with support from Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH under the Sustainable Urban Development – Smart Cities II programme, developed interactive e-modules to disseminate key features of the revised Central Public Health and Environmental Engineering Organisation (CPHEEO) water manuals for pressurised water supply 24X7 (Drink from Tap). These modules integrate videos, infographics, and case studies and are being delivered through regional and national workshops to enhance accessibility and Urban Local Bodies' (ULBs) capacity. These modules are available on **iGOT Karmyaogi platform** of the **Government of India**.



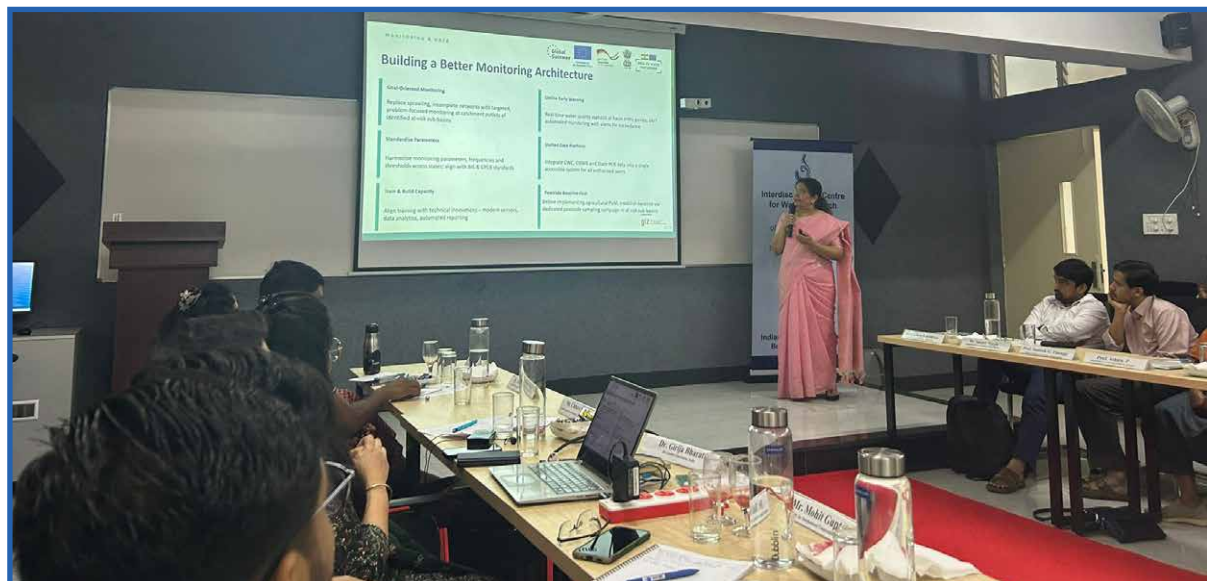
A stakeholder consultation workshop was organized on February 17, 2026 on Urban Water Associations (UWA) for India. It focused on the critical institutional reforms necessary to transition Indian cities toward sustainable, high-quality "Drink from Tap" water systems. As a key technical partner, MGC led the discourse on developing a robust UWA Framework. Dr. Girija K. Bharat (MGC) delivered a presentation on the concept of the UWA Framework, which outlined the structural changes that can help modernise urban water management. The workshop brought together experts from institutions such as the World Bank, Delhi Jal Board, National Institute of Urban Affairs (NIUA), Safe Water Network, Sankala Foundation and other organizations. The association aims to serve as a one-stop platform for ULBs to drive urban water reforms.





Services for policy coordination and facilitating high-level missions and events as part of India-EU Water Initiative (IEWI) (2025-2027)

The IEWI aims to enhance EU-India cooperation on technological, scientific, and water management aspects, as well as related joint EU-India business opportunities and partnerships between regions and cities in the water sector. MGC in association with VITO (Vlaamse Instelling voor Technologisch Onderzoek), Belgium, is facilitating targeted exchanges, collaborative workshops, and strategic support to IEWI. This will be achieved by coordinating knowledge exchange on river basin management successes and challenges, supporting knowledge sharing between the EU and India while facilitating EU Member State engagement, and organising cooperation missions to strengthen collaboration between the EU, the Ministry of Jal Shakti, and EU Member States in the water sector. The project is supported by GIZ.





Review and recommendations for strengthening regulations on onsite wastewater treatment for bulk generators in Indian cities (2026)

Amidst the rising urban wastewater generation and gaps in regulation for bulk generators, MGC, in collaboration with the WASH Institute, is conducting a study to strengthen onsite wastewater treatment governance for bulk generators in Indian cities. The project focuses on reviewing national, state, and city-level regulatory frameworks; analysing existing bylaws and thresholds for bulk wastewater

generators; benchmarking international best practices; and engaging key stakeholders, including housing complexes, high-rise buildings, hospitals, hostels, hotels (5H), water and sewerage boards, state pollution control boards, and urban development authorities, to identify implementation challenges. Key deliverables include a comprehensive regulatory assessment, stakeholder insights, and a set of targeted, actionable recommendations along with a draft model urban bylaw and a policy brief to help improve the design, operation, monitoring, and reuse outcomes of onsite treatment systems for bulk generators.



Awards and Recognitions

Global ESG Award 2025

MGC is proud to have been recognised at the **Global ESG Awards 2025**, receiving the **Gold Category award for water conservation initiatives aligned with the United Nations' Sustainable Development Goals (SDGs)**. This recognition reflects MGC's continued commitment towards advancing sustainable water management and environmental stewardship across its areas of work in India and beyond. Through a combination of evidence-based research, policy innovations, and collaborative engagement, MGC has been contributing to solutions that support sustainability, circular economy principles, and climate resilience. MGC remains committed to strengthening its work in sustainable development and contributing to a more resilient, inclusive, and environmentally responsible future.



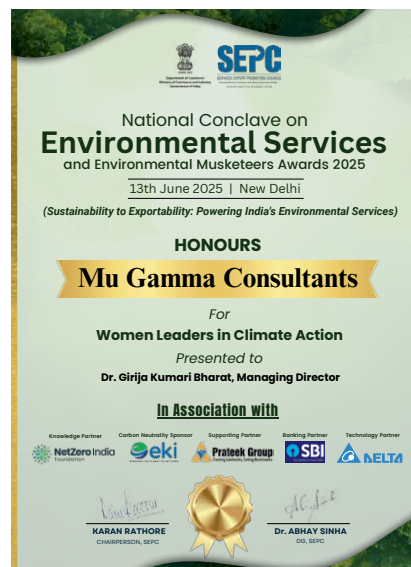
Women Leader in Climate Action Award 2025

MGC is honored to have received the '**Women Leader in Climate Action**' award from the Services Export Promotion Council (SEPC), **Department of Commerce, Ministry of Commerce and Industry, Government of India**, at the **National Conclave on Environmental Services**, on 13th June 2025, New Delhi. The award recognizes outstanding women leaders who have demonstrated exceptional commitment, innovation, and leadership in advancing climate action initiatives and driving sustainable development outcomes.



Professional Excellence Award 2025

The **MGC Professional Excellence Award 2025** was presented to **Dr Sonia Grover, Associate Director, MGC**, in recognition of her outstanding contributions, consistent commitment and dedication in delivering excellence, attention to detail, and the ability to effectively manage multiple responsibilities that has significantly strengthened project outcomes and team performance. Sonia has demonstrated strong professionalism, collaborative spirit, and reliability in her work, contributing meaningfully across various assignments. Her proactive approach, willingness to support colleagues, and focus on maintaining quality standards reflect the values that MGC stands for. This recognition celebrates her efforts and is a testament to her steadfast commitment and remarkable contribution.





Meetings, Events and Talk Sessions

Peer to Peer Learning Workshops on River Basin Management (RBM) (May 2026)

The India–EU Water Initiative (IEWI) Workshop on RBM was held on 13th May 2026 at IISc Bangalore and on 15th May at IIT, Hyderabad. This workshop was supported by the Ministry of Jal Shakti, Department of Water Resources, RD & GR, Govt. of India (NRCD) and GIZ. It provided a platform for discussing how to improve RBM planning for the Periyar, Cauvery, Krishna and Godavari basins. It was a peer-to-peer learning exchange between India and the European Union (EU) where Dr Girija Bharat presented the key lessons from the Tapi and Ramganga RBM Plans developed under the India–EU Water Partnership and the Indo-German Support to Ganga Rejuvenation Project.

The session explored how evidence-based basin diagnostics translate into actionable RBM Plans and



lessons from applying EU Water Framework Directive (WFD) approaches in the Indian context. It brought together IISc Bangalore, IIT Palakkad, NIT Calicut, NIT Trichy, CSIR NEERI, the NIT Warangal, NIT Surathkal, VITO Belgium, and Bochum University (Germany).



Stakeholders' Meeting on Chemicals Management: Persistent Organic Pollutants & Plastics, Dehradun (February 2026)

A multi-stakeholder meeting on "Chemicals Management: POPs and Plastics" was convened on 24th February 2026 in Dehradun, Uttarakhand bringing together key institutions to address emerging environmental and public health challenges. The programme was conducted in collaboration with the Uttarakhand Pollution Control Board, with support from the Indo-Norwegian INOPOL consortium, the Royal Norwegian Embassy, Norwegian Institute for Water Research, Toxics Link, MGC, SRM Institute of Science and Technology, and Central Institute of Petrochemicals Engineering and Technology (CIPET). From MGC, Nathaniel B Dkhar and Dr Kriti Akansha co-hosted this event.

The meeting witnessed participation from a wide range of stakeholders, including the Uttarakhand Pollution Control Board, CSIR-National Environmental

Engineering Research Institute (NEERI), state government departments such as Health and Family Welfare, industry representatives, NGOs, researchers, and academia. The discussions centred around strengthening the monitoring and management of POPs and plastics, including both microplastics and macroplastics, within the state.



Global Summit on Blue Economy 2026

Dr Girija Bharat participated in the Global Summit on Blue Economy held at Bhubaneswar, Odisha, on the 13th and 14th of March 2026. This was hosted by Bhubaneswar City Knowledge and Innovation Cluster (BCKIC) and supported by the Principal Scientific Advisor to the Prime Minister of India. Dr. Bharat delivered an insightful talk at the session “Blue Economy & Socio-Economic Impact”, where she stressed science-based environmental management. The summit brought together leaders from government, industry, sustainability organisations, and the innovation ecosystem to explore how ocean-based development can drive inclusive growth while protecting marine ecosystems.



World Sustainable Development Summit, WSDS-2026

A thematic track titled ‘**From Source to Seas: Science-informed pathways for transforming plastic and chemical pollution governance**’ was convened at the Taj Palace, New Delhi on 25th February 2026 as a part of the 25th edition of the World Sustainable Development Summit under the umbrella theme ‘Transformations: Vision, Voices, and Values for Sustainable Development’. Hosted under the INOPOL project, the session focused on the need for science-based, inclusive, and policy-driven responses to plastic and chemical pollution across riverine, urban, and marine systems.

The special address was delivered by the **Honourable Andreas Bjelland Eriksen**, Norwegian Minister of

Climate and the Environment; **Ms. Supriya Sahu**, Additional Chief Secretary, Department of Environment, Climate Change and Forests, Government of Tamil Nadu; **Mr. Andreas B. Schei**, Counsellor (Climate and Environment), Norwegian Embassy in New Delhi; and **Mr. Pazhaniyandi V. Pillai**, Director, Control of Pollution Division, Ministry of Environment, Forests & Climate Change, Government of India. Key session highlights included the release of the “**Plastic Waste Strategy Report for Tamil Nadu**” and the “**Action Plan on Management of Persistent Organic Pollutants (POPs) in Tamil Nadu**”, along with the **INOPOL documentary** showcasing field research, monitoring, modelling and capacity-building efforts. The session also screened two videos that showcased key project findings and highlighted evidence and insights from field research, monitoring, and modelling.

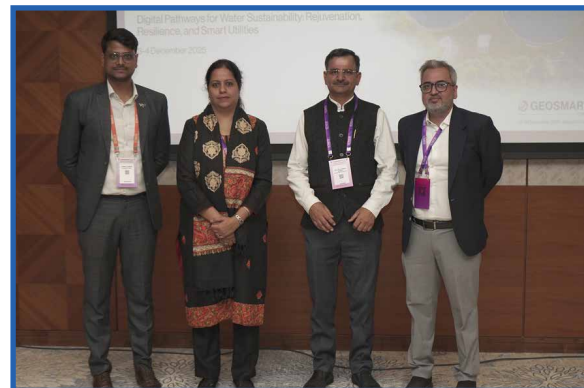




Water Management Summit, 2025

Dr. Sonia Grover gave a presentation on **"From Ground to Governance: Co-Creating SRTW Policies through Community Participation & Multi-Tiered Coordination"** during a session titled "Community-

Led Governance, Tech-enabled Participation & Multi-Level Institutional Coordination," organised by Geospatial World in December 2025 in New Delhi. She provided insight into the SRTW policy development process, which was inclusive and participatory in nature.



CSR & Sustainability Conclave, 2025

Dr Girija Bharat chaired the session 'Business Beyond Profit: Corporate Engagement for Social Transformation' at the **CSR & Sustainability Conclave 2025** hosted by the Bhubaneswar City Knowledge Innovation Cluster Foundation from 21st -22nd November 2025 in

Bhubaneswar. The discussion highlighted the shift from one-time CSR interventions to long-term, collaborative, and measurable development partnerships. From strengthening rural livelihoods and digital inclusion to women-led enterprises and sustainable community programmes, the session reinforced CSR's role as a catalyst for social equity and inclusive growth.



IFAT India Conference, 2025

Dr Girija Bharat was a panelist in a thought-provoking session on "**Circular Economy for Water-Secure Agriculture**" at the **IFAT India 2025**, which was convened at the Bombay Exhibition Centre (NESCO), Mumbai, on 15th October 2025. The session brought together experts to explore strategies for optimising water use and embedding sustainability within agricultural systems, which is a critical priority in the

face of growing water stress. The panel reinforced the need to integrate circular economy principles into agriculture to ensure long-term water security while simultaneously supporting resilient, productive, and climate-adaptive farming systems and the importance of multi-stakeholder collaboration in advancing sustainable water management practices and driving systemic change in the agriculture sector.



Stakeholder Consultations and Sampling – MAHAT (June 2025)

The **MAHAT Project (Multi-scale Analysis of the Health Attributes of Plastic Recycling in India)** organised a special dialogue meeting on recycling and health at the SRM Institute of Science and Technology on 19th June 2025. The meeting had participants from the government, civil society organisations, industry, research, and community leadership. The meeting facilitated the exchange on the health dimensions of plastic recycling, recognising the vital role the sector plays in managing pollution and supporting circular economy goals, while also addressing the need for improved safeguards, working conditions, and policy support. The MAHAT team introduced the project's aims, partners, and research approach. The discussions focused on the health risks that workers and communities in India experience due to plastic recycling. MAHAT seeks to inform strategies that are responsive to on-the-ground realities and contribute to safer, more inclusive, and just recycling systems.





Capacity Building and Training Programmes

Training Programme on “Stockholm Convention on Persistent Organic Pollutants” organized by CSIR-NEERI and CPCB, New Delhi (December 2025)

A training programme on the “Stockholm Convention on POPs” organized by CSIR-National Environmental Engineering Research Institute (CSIR-NEERI) and Central Pollution Control Board (CPCB), New Delhi, was held at CPCB headquarters in New Delhi from 11th to 13th December 2025. The participants were newly recruited scientists from CPCB. This programme was organised under the ongoing GEF-UNEP-funded project “Review and update of National Implementation Plan on POPs”. The training focused on POPs and several cross-cutting areas such as global chemical management policies, contaminated site assessment and remediation, plastic waste management, e-waste management, best available technology (BAT) and best environmental practices (BEP); chemicals and gender; global framework on chemicals; science-policy interface; and the economic cost of chemical exposures were discussed. Dr Girija Bharat delivered a lecture on “**Strengthening Science-Policy interface in India**”.



Building Capacity on Plastic & POPs Pollution: INOPOL Training Programme (September 2025)

As a part of the Indo-Norwegian INOPOL initiative, a two-day digital training workshop on “**Advancing Science-Based Monitoring and Societal Responses to Plastic and POPs Pollution**” was successfully conducted on 9th–10th September 2025. The workshop brought together over 200 participants from Central and State Pollution Control Boards, research institutions, NGOs, and industry, creating a dynamic platform for knowledge exchange and cross-sectoral learning. The sessions drew on INOPOL project’s ongoing research along the Cauvery River in Tamil Nadu state, and included conceptual and applied components. Participants engaged with leading experts on critical themes, including microplastic analysis and macroplastic monitoring, emerging concerns such as PFAS and POPs, and global policy developments, including plastic treaty negotiations and the Stockholm Convention.

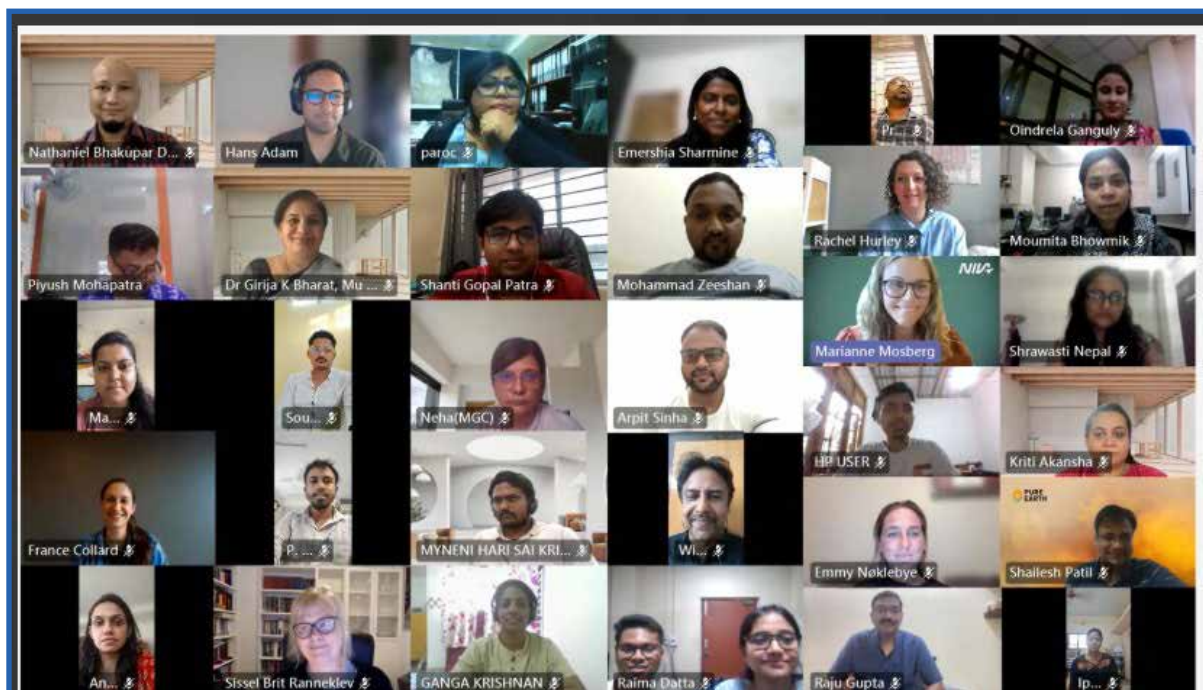


Funded by
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INOPOL Training Programme

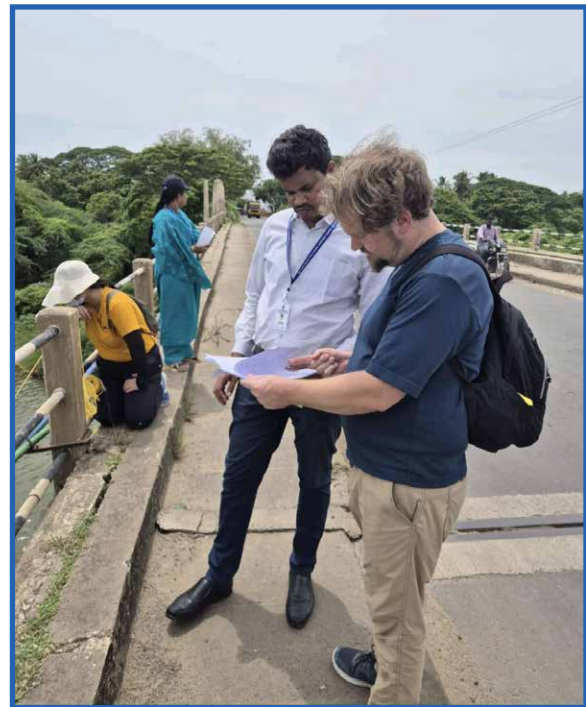
Advancing science-based monitoring and societal responses to plastic and POPs pollution

9th and 10th of September 2025



INOPOL Sampling Visit: Field monitoring for Macroplastic Pollution in Cauvery River (September 2025)

The Indo-Norwegian INOPOL team, in partnership with the Tamil Nadu Pollution Control Board, undertook an extensive field campaign in September 2025 to monitor macroplastic pollution levels in the Cauvery River in Tamil Nadu. The project team travelled over 400 km upstream across the Cauvery catchment as part of the final monitoring phase of a study initiated in 2023. This ambitious campaign reflects a strong commitment to generating robust, field-based evidence for addressing plastic pollution in river systems. By combining international expertise with local institutional collaboration, this effort represents a significant step towards strengthening river health, informing policy, and advancing sustainable water management practices.





Partnerships

- A. MoU with CDD India:** MGC has signed a Memorandum of Understanding (MoU) with the Consortium for DEWATS Dissemination Society (CDD India) to strengthen knowledge and practice around circularity. CDD India, a Bengaluru-based non-profit organisation, is dedicated to advancing inclusive and sustainable water and sanitation solutions, with a strong focus on improving the quality of life for communities. Through this collaboration, MGC and CDD aim to promote and scale decentralised Nature-based solutions (NbS), reinforcing circular approaches in the water and sanitation sector in India.
- B. MoU with SRMIST:** MGC signed an MoU with SRMIST, Chennai, at the 10th anniversary celebration of MGC. Over the years, MGC and the SRMIST-REACH Centre have maintained a strong collaboration, jointly advancing research on POPs and plastics in the Cauvery Basin in Tamil Nadu and the Tapi River Basin in Gujarat. This renewed collaboration aims to further strengthen the partnership by promoting research, as well as skill and capacity building among young researchers, towards a more sustainable environment. This venture will also support continued research on the impacts of emerging contaminants and microplastics on ecological systems.
- C. MoU with KIIT:** MGC signed an MoU with Kalinga Institute of Industrial Technology (KIIT), Odisha. KIIT is a pioneer in research and innovation and has made significant contributions to advancing the blue economy vision in India. MGC and KIIT share a common vision of promoting a sustainable and inclusive blue economy. Building on MGC's ongoing work under initiatives such as the INOPOL project, this collaboration will further strengthen efforts to address challenges related to plastic and chemical pollution, particularly in coastal and marine ecosystems. The partnership aims to enhance research, knowledge exchange, and capacity building, especially among young researchers, while fostering innovative solutions for sustainable resource management. Together, MGC and KIIT will work towards advancing science-based interventions and policy-relevant insights to support India's transition to a resilient and circular blue economy.



Publications

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- ➔ INOPOL (2026). *Reducing plastic pollution in Tamil Nadu, India: A science-based strategy*. Norwegian Institute for Water Research (NIVA), Mu Gamma Consultants Pvt. Ltd. (MGC), & Central Institute of Petrochemicals Engineering and Technology (CIPET).
- ➔ INOPOL (2026). *Managing persistent organic pollutants in Tamil Nadu, India: From science to strategy and action framework*. Norwegian Institute for Water Research (NIVA), Mu Gamma Consultants Pvt. Ltd. (MGC), SRM Institute of Science and Technology (SRMIST), & Toxics Link.
- ➔ Roy-Basu, A., Bharat, G., Grung, M., Ranneklev, S. B., Akansha, K., & Jain, M. (2025). *PFAS in drinking water in India: A review* (Report No. 8088-2025). Norwegian Institute for Water Research Report.
- ➔ Plassnig, S. N., Roy-Basu, A., Grover, S., Krishnan, A., Mosberg, M., & Kvanneid, A. J. (2025). *Gender dimensions of plastic and POPs pollution in India: Tracing impacts across the plastics value chain* (NIVA Report No. 8136-2025, ISBN 978-82-577-7874-3). Norwegian Institute for Water Research Report.
- ➔ INOPOL (2025). *An overview of the gender dimensions in the India-Norway Cooperation Project on Capacity Building for Reducing Plastic and Chemical Pollution in India*. Norwegian Institute for Water Research (NIVA), Mu Gamma Consultants Pvt. Ltd. (MGC).
- ➔ INOPOL (2025). *Hazardous but invisible: Baseline report on persistent organic pollutants in Tamil Nadu, India*. Norwegian Institute for Water Research, Mu Gamma Consultants, SRM Institute of Science and Technology, & Toxics Link.
- ➔ INOPOL (2025). *Baseline report on plastic waste management in Tamil Nadu, India: Perspectives and pathways*. Norwegian Institute for Water Research (NIVA), Mu Gamma Consultants, SRM Institute of Science and Technology (SRMIST), Toxics Link, & Central Institute of Petrochemicals Engineering and Technology (CIPET).

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- ➔ Jyrwa, J. D., Fancon, G. P., Dkhar, N. B., Rani, P., Marak, L., Sangma, S., Kshiar, B., Lyngdoh, B. D., Fancon, V., Borgohain, S., & Marbaniang, E. C. (2026). Biodiversity citizen science in Meghalaya: Case study of potentials, public perceptions and attitudes in the Eastern Himalayas. *Indian Journal of Ecology*, 53(1), 24–29. <https://doi.org/10.55362/IJE/2026/4755>
- ➔ Prasad, G., Mohanty, S., Chakraborty, P., & Bharat, G. K. (2025). *Microplastics in the rivers of Gujarat (India) to the Arabian Sea: Assessment of the sources, distribution, and associated environmental risk*. *Integrated Environmental Assessment and Management*, 21(4), 843–857. <https://doi.org/10.1093/inteam/vjaf011>

Book

- ➔ Chakraborty, P., Bharat, G. K., Steindal, E. H., Mohanty, S., Hurley, R., Olsen, M., & Pandey, S. (Eds.). (2025). *Efficient and enhanced management of plastic waste in India: Case studies from Vapi and Surat*. Elsevier.

Book Chapters

- ➔ Akansha, K., Krishnan, A., Bharat, G. K., Chakraborty, P., Sujith, B. S., & Roy-Basu, A. (2026). Climate-driven pathways of emerging contaminants with public health systems. In S. Pachauri & A. Pachauri (Eds.), *Climate change: A public health crisis*. <https://a.co/d/01IB26Wu>
- ➔ Grover, S., Bharat, G.K., Dkhar, N.B. (2026). The National Water Crisis: How the Hospitality Sector can Contribute to Solutions. In: Anand, V., Tewari, P.K., Jindal, M.K. (eds) *Water-Saving Technologies for Hotels and Restaurants. Advances in Sustainability Science and Technology*. Springer, Singapore. https://doi.org/10.1007/978-981-95-7920-4_12

- ➔ Grover, S., Lakhwan, N., & Bharat, G. K. (2025). Circular economy in water management as a driver to sustainable businesses. In S. A. Bandh, F. A. Malla, & A. Halog (Eds.), *Water use efficiency, sustainability and the circular economy* (pp. 59–68). Elsevier.

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- ➔ Bharat, G. K. (2026, February). PFAS: Ubiquitous but invisible high-risk chemicals. *TerraGreen Magazine*.
- ➔ Roy-Basu, A., & Akansha, K. (2026, February). PFAS management: Exploring the scope, impacts, evolving challenges, and mitigation strategies. *TerraGreen*, 17(12), 31–34.
- ➔ Akansha, K., & Krishnan, A. (2025, December). Harmony in action: COP28 and global water sustainability for a resilient future. *Water Age*.
- ➔ Lakhwan, N., Grover, S., & Bharat, G. (2025, October). From linear to circular: Strengthening urban resilience in water, energy and waste through the 6R principles. *Shelter Magazine*, 26(2). HUDCO. ISSN 2347-4912
- ➔ Grover, S., & Sarkar, S. K. (2025, May). Decentralised wastewater: Small systems, big impacts. *Everything About Water*
- ➔ Krishnan, A., Bharat, G. K., & Sarkar, S. K. (2025, April). *The plastic tide: The rising impact of plastic and microplastic pollution. Everything About Water.*

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- ➔ Bharat, G. K., & Sarkar, S. K. (2026, March 16). *Building India's climate resilience with water at the core. The Hindu.*
- ➔ Akansha, K., & Krishnan, A. (2026, February 4). *Buried under plastics: Understanding gendered vulnerability in waste economies. The Pioneer.*
- ➔ Bharat, G. K., & Sarkar, S. K. (2025, November 10). Water at the heart of climate resilience. *The Statesman.*
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- ➔ Sonia Grover, Venkatesh Raghavendra (2025, March 22) How healthy are our ice reserves? *The Deccan Herald.*



MGC's next-decade vision: Moving towards *Viksit Bharat 2047*

The vision for our next decade reflects both ambition and responsibility, anchored in sustainability, innovation, and inclusive growth. At a time defined by the AI revolution, climate uncertainty, rapid urban transitions, and emerging environmental risks, MGC is positioning itself as a "**knowledge-to-impact catalyst**", driving solutions that are not only technically robust but socially transformative.

A central pillar of our forward-thinking strategy for India is alignment with India's **Viksit Bharat 2047** vision, a goal for a technologically advanced, environmentally sustainable, economically prosperous and self-reliant (Atmanirbhar) and socially inclusive nation. MGC's evolving initiatives directly contribute to this national agenda by bridging science, policy, and practice.

Over the coming decade, MGC will scale its impact through AI-enabled tools and data-driven approaches in water, waste management, and climate systems. By leveraging predictive analytics, we aim to forecast pollution pathways, optimise resource efficiency, and support evidence-based decision-making across sectors.

As part of our new initiatives, we are working to establish a **National Environmental Data and Policy Hub**, integrating AI, citizen science, and research insights to inform real-time governance and planning. This platform will support district-level climate resilience strategies and water reuse roadmaps, contributing to decentralised and adaptive planning under the Viksit Bharat framework.

We foresee our role as a national thought leader in environmental governance. Through research, policy advisory, and capacity-building programmes, spanning emerging areas such as microplastics pollution control, river basin management, and safe reuse of treated water, we aim to support government and other institutions at all levels. Our work aligns closely with national capacity-building priorities, enabling evidence-based policymaking and implementation. In achieving this vision, we will:

- ➔ Act as a national think tank on water reuse and pollution control, especially of emerging contaminants, and draw AI-driven sustainability solutions.
- ➔ Provide technical advisory and training to central and state government officials in alignment with Viksit Bharat's Capacity Building Commission.

Recognising the importance of innovation and youth engagement in shaping a sustainable future, MGC will continue to empower a new generation of professionals skilled in both sustainability and digital intelligence. In parallel, we are committed to advancing behavioural change through partnerships aligned with **Mission LiFE** (Lifestyle for Environment), promoting sustainable consumption and community-driven environmental stewardship. We are ready to contribute as a trusted national partner, driving scalable solutions, fostering collaboration, and enabling a resilient and sustainable future.

Candid Moments





QR Codes for INOPOL Reports

Reducing Plastic Pollution in Tamil Nadu, India: A Science Based Strategy



PFAS in drinking water in India –A review



Managing Persistent Organic Pollutants in Tamil Nadu, India: From Science to Strategy and Action Framework



Baseline Report on Plastic Waste Management in Tamil Nadu, India



Status Report: Persistent Organic Pollutants (PoPs) in Uttarakhand, India



Baseline Report on Persistent Organic Pollutants in Tamil Nadu, India



Gender dimensions of plastic and POPs pollution in India



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