Office of the Principal Scientific Adviser to the Government of India

1999-2024
Years of Impact through Science Advice

सत्यमेव जयते

SCIENCE & TECHNOLOGY CLUSTERS

COMPENDIUM of Water Technologies

S&T Cluster Partners

BCKIC
Bhubaneswar City Knowledge Innovation Cluster Foundation

PKC

DRIIV

JCKIC

BeST CLUSTER

RICH
Research and Innovation Circle of Hyderabad

PI - RAHI

www.psa.gov.in

अजय के. सूद
भारत सरकार के प्रमुख वैज्ञानिक सलाहकार
Ajay K. Sood
Principal Scientific Adviser to the Govt. of India

सत्यमेव जयते

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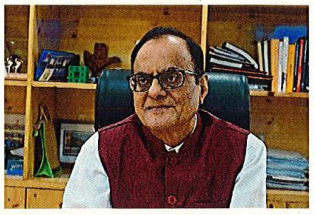


Foreword – Water Management

India's innovation landscape has entered an exciting phase where scientific research, entrepreneurship, and technology development are converging to transform key sectors of national importance. Rejuvenation and sustainable management of water bodies is emerging as a key focus area, with deep-tech start-ups, research institutions, and industry partners jointly developing solutions that are resilient, cost-effective, and scalable. As global attention turns toward India's growing strengths in water management innovation, substantial opportunities are arising for indigenous technologies to support global water security initiatives, while also enabling solutions to be adapted and tested within India's diverse hydrological domains.

The Science and Technology (S&T) Clusters initiative of our Office plays a pivotal role in fostering cross-sectoral and cross-border collaboration. Designed as integrated regional ecosystems, the Clusters bring together academia, industry, startups, and government to address local priorities, drive multidisciplinary innovation, and advance socio-economic development aligned with India's national and global competitiveness and the vision of Atmanirbhar Bharat. Within this coordinated framework, the Clusters connect scientific capabilities with entrepreneurial drive, accelerating technology maturation, strengthening data-driven evaluation, and improving pathways for deployment. Moreover, the Clusters function as key platforms for international engagement, facilitating collaboration with global partners on joint research, co-development, and technology transfer, thereby further integrating India into the global innovation landscape.

This Water Management Compendium presents a curated set of technologies emerging from India's water innovation ecosystem that have shown measurable impact on the ground and are ready for broader deployment. These solutions reflect a shared commitment to strengthening water systems, enhancing community resilience, and expanding India's contribution to global advancements in sustainable water management.

The contributions of the participating Clusters and start-ups are acknowledged for their commitment and for presenting solutions that highlight the capability of India's science and innovation ecosystem. This compendium aims to provide policymakers, researchers, industry leaders, and ecosystem enablers with a reference point for understanding India's evolving water management landscape and its emerging opportunities for international collaboration.

(Ajay K Sood)

Date: 21st November 2025

डॉ. (श्रीमती) परविन्दर मैनी
वैज्ञानिक सचिव
Dr. (Mrs) Parvinder Maini
Scientific Secretary

सत्यमेव जयते

भारत सरकार के
प्रमुख वैज्ञानिक सलाहकार के कार्यालय
कर्तव्य भवन 3, जनपथ, नई दिल्ली - 110001
Office of the Principal Scientific Adviser
to the Government of India
Kartavya Bhavan 3, Janpath, New Delhi-110001

Message

Water resources remain fundamental to India's development, underpinning livelihoods, ensuring water security, and shaping the nation's socio-economic landscape. As the country faces growing challenges from climate variability and mounting stress on freshwater systems, science and technology are becoming essential catalysts for making water management more resilient, efficient, and sustainable.

India's water management ecosystem has gained considerable momentum in recent years. From watershed restoration and nature-based solutions to IoT-enabled monitoring, remote sensing, robotics, and geospatial intelligence, the sector is rapidly advancing. Emerging deep-tech tools, including advanced data analytics and AI-driven modelling, are empowering innovators to tackle long-standing challenges in water availability, quality, and distribution. These advancements are improving system efficiency, strengthening decision-making, optimising resource use, and delivering measurable impact across diverse water contexts.

Launched in 2020, the S&T Clusters, a flagship initiative of the Office of the Principal Scientific Adviser (OPSA), function as demand-driven, collaborative ecosystems that bring together academia, industry, startups, MSMEs, government bodies, and civil society. By building interconnected innovation networks, the clusters accelerate the development and deployment of technology-driven solutions that tackle regional challenges while advancing national priorities. At present, we have eight S&T Clusters across India working in diverse sectors and delivering transformative outcomes through technological innovation, public-private partnerships, and implementation frameworks.

This *Compendium on Water management and rejuvenation* reflects these collective efforts. It showcases a curated set of promising technologies that have achieved market readiness, demonstrated field-level success, and shown strong potential to strengthen India's water management sector. Each featured solution reflects the commitment of India's science and innovation community to strengthen water systems, promote sustainable resource management, and support the development of a resilient, future-ready water landscape.

I commend the participating Clusters for their continued dedication in advancing water management innovation and for highlighting impactful, scalable, and forward-looking solutions that reinforce India's emerging leadership in science- and technology-driven water stewardship.

Maini

(Parvinder Maini)

Dated : 21st November, 2025

Tel. : +91-11-24011869, E-mail : parvinder.maini@gov.in Website : http://www.psa.gov.in

CONTENT

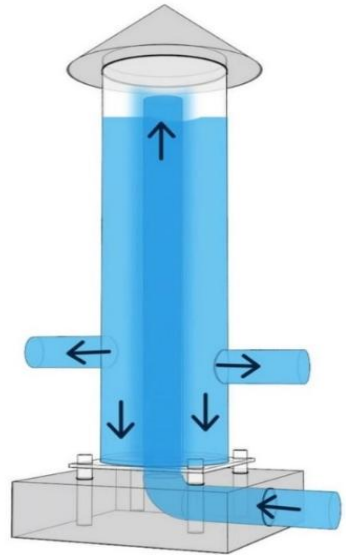
Ajivam Water Pvt. Ltd.

www.ajivamwater.com

Water Supply & Piped Irrigation

Innovative hydraulic isolation structures to improve efficiency of pipe water supply and irrigation systems

PRODUCT



DESCRIPTION

Conventional water supply systems are designed for continuous flow, making them unsuitable for India's largely intermittent supply conditions. This leads to issues such as bypassed water tanks, unequal water distribution, differential pressures between upstream and tail-end areas, and low household pressure. The proposed shaft system—comprising two vertical pipes with an annular space between them—acts as a hydraulic separator. This space generates hydraulic head, maintains downstream pressure, and removes air pockets, ensuring balanced water distribution. By stabilizing pressure variations across the network, shafts can effectively replace conventional storage tanks in water supply systems.

VALUE PROPOSITION

- Efficiency boasting innovations
- Sustainable interventions
- Community centric services

END USERS

Urban Local Bodies, Public Health Engineering, Dept and parastatal bodies responsible for water supply and irrigation systems

UNIT COST

- Minimum Rs. 15 Lakhs

FOUNDER

Dr. Anujkumar Ghorpade
Dr. Pradip Kalbar

MAHARASHTRA

TECHNOLOGY READINESS LEVEL:

TRL 9

IP DETAILS

Patent Number: 202121029380
Status: Under review
Patent Title: A Zonal Storage water supply system with Hydraulic Isolation Structures & a method thereof
Type: Indian

DEPLOYMENT USED CASES

- **No of Units Deployed**: 10
- **Locations Covered:** Maharashtra, Madhya Pradesh, and West Bengal
- **Type of Funds:** CSR funds
- **Funding Agency:** WaterAid, Coal India Limited, NBCFDC
- **Beneficiaries Impacted**: More than 70,000

ACHIEVEMENTS/ COMPLIANCES

- **Funds Raised:** Rs. 30 Lakhs from SINE, IIT Bombay
- **Awards/Recognition:** Recommendation from Ministry of Jal Shakti, Govt of India, MEERI, Maharashtra, and Best paper at IWWA Pune 2023

TECHNOLOGY VIDEO LINK

https://youtu.be/akUwaRyvrZ4?si=e0ohTlWIewNZ5Elg

CORE SDGs ALIGNED

CLUIX Pvt. Ltd.

www.cluix.in

Clean Tech

CLUIX C012 Digital Water Quality Analyzer

PRODUCT

DESCRIPTION

The CLUIX C012 is a portable, multi-parameter water quality analyzer that combines LED-based spectrophotometric absorbance, electrochemical sensing, and smart connectivity for real-time, field-ready monitoring. It delivers lab-grade accuracy in a compact form, supporting parameters like pH, TDS, and trace contaminants. With BLE, Wi-Fi, and GSM integration, the device enables cloud-based data access, analytics, and alerts, making it ideal for drinking, industrial, and used water applications.

VALUE PROPOSITION

- Easy to use
- Affordable
- Reliable
- Sustainable

END USERS

Government water and health departments, CSR/WASH foundations, water utilities and private operators, NGOs and international development agencies, and enterprises managing decentralized water services.

UNIT COST

- Kit price: Rs 68.5k + taxes
- Reagent box price: Rs 17k + taxes

FOUNDER
Mr. Robin Singh

DELHI

TECHNOLOGY READINESS LEVEL:
TRL 9+
Our digital water quality analyzer has a fully proven and operational system that is currently in production.

IP DETAILS
Patent Number: 202411041831
Status: Published
Patent Title: AI-driven portable water quality analyzer with IoT (Internet of Things) monitoring
Type: Indian

DEPLOYMENT USED CASES

- **No of Units Deployed**: 150+
- **Locations Covered:** Assam, Delhi, Haryana, Rajasthan, Tamil Nadu, Uttar Pradesh, Telangana, Karnataka
- **Type of Funds:** Grant Funding
- **Funding Agency:** Invest India, KIIT-TBI, IIT Kanpur, ASCI Hyderabad, IIT Palakkad, IRMA ISEED, IIT Ropar TIC
- **Beneficiaries Impacted**: : PHED Haryana, Ministry of defence, Imagine H20 Singapore (TWAD & SWSM UP), IFellow foundation, TATA Trusts, Ambuja Cement Foundation, GD Water Consultants, RITE Water, Pragathy Degree College, DrinkPrime, BOSON White Water
- **Institutional Partnership:** FITT IIT Delhi, SIIC IIT Kanpur, TBI KIIT Bhubaneshwar, IIT Palakkad Techin, TIF-AWaDH IIT Ropar

ACHIEVEMENTS/ COMPLIANCES

- **Invest India:** National Jal Jeevan Mission – Innovation Challenge (2021)
- **IIT Kanpur:** CITI Social Innovation Lab (2024)
- **IIT Palakkad:** HDFC Parivartan Impact Grant (2024)
- **KIIT-TBI:** SISF - 2023, DST NIDHI-SSS - 2024, SAMRIDH - Matching Fund by MEITY - 2025
  Emerged as winner of Wash innovation challenge
- Tech2Impact's Innovation for Planet, Vienna
- Pilot with Imagine H20 in UP and Tamil Nadu

TECHNOLOGY VIDEO LINK

https://youtu.be/U1KmccovdaM?si=VldRQl6ZK1pKQOMT

CORE SDGs ALIGNED

Thinkraw Innovations Pvt. Ltd.

www.thinkrawinnovations.com

Sector: Aquaculture

Solar Powered Auto-navigable Solution for an enhanced harvest in fish and prawn farming sector

PRODUCT

DESCRIPTION

DhivaraMitra is an IoT-enabled and cleantech-based navigable solution for enhanced harvest in fish and prawn farming through uniform distribution of feed, uniform maintenance of DO & pH levels of the water body at the desired level

VALUE PROPOSITION

- DhivaraMitra is an (IoT-enabled) all-in-one integrated solution
- Auto-navigable solution
- Solar Powered

END USERS

Farmer beneficiaries of Kansabansa FPC, Bihang Organic FPC, Subarnarekha FPC, Basta FPC, PVR Aqua FPC, Aqua Doctor Solutions, Upakuliya Primary Matsya Jeebi Smaabaya Samiti Ltd.

UNIT COST

- INR 550000.00

FOUNDER

Minushri Madhumita
Amrita Jagatdeo

ODISHA

TECHNOLOGY READINESS LEVEL:

TRL: 9

IP DETAILS

Patent Number: 510507
Status: Granted
Patent Title: An automatic apparatus for use in aquafarming
Type: (Indian/International) Indian

DEPLOYMENT USED CASES

- **No of Units Deployed:** 11
- **Locations Covered:** Indian States as Odisha, West Bengal and Uttar Pradesh
- **Type of Funds:** CSR/Grant Funding – Both CSR and Grants
- **Funding Agency:** BIRAC Seed Fund, HDFC Bank, MSME Hackathon, Vikas RABI
- **Beneficiaries Impacted:** 6431
- **Institutional Partnership:** CIFA Bhubaneswar, OUAT

ACHIEVEMENTS/ COMPLIANCES

- Selected by MSME Hackathon programme – INR 12.5 Lakhs
- Selected by IIT Ropar – INR 2 Lakhs
- HDFC Parivartan Grant – 23.5 Lakh
- Received INR 25 Lakh funding under Chunauti 2.0
- Selected by NRDC for INR 30 Lakh funding (OCD)
- Selected by ABI ICRISAT for 30 Lakh funding under for Nidhi SSS.

TECHNOLOGY VIDEO LINK

https://www.youtube.com/watch?v=_7aL6XNEYpg&pp=ygUWZGhpdmFyYSBtaXRyYSB0aGlua3Jhdw%3D%3D

CORE SDGs ALIGNED

Bariflo Cybernetics Pvt. Ltd.

www.bc-pl.com

Bariflo Cybernetics

Agriculture & Allied Areas

Intelligent waterbody management system for water body rejuvenation

PRODUCT

DESCRIPTION

This innovation enhances aquaculture efficiency, sustainability, and profitability through AI, IoT, and data-driven technologies. It improves water quality with sediment-level aeration and real-time monitoring, ensuring optimal oxygen levels and preventing waste buildup. Automated feeding with smart check trays optimizes feed conversion, reduces waste, & detects diseases early. AI-powered predictive analytics and remote sensing provide proactive insights, preventing water quality issues. A scalable IoT infrastructure with LoRa connectivity ensures seamless data transmission across large farms. The AI-powered dashboard aggregates real-time data for visualization, alerts, and predictive maintenance. This smart system transforms aquaculture into a more efficient, sustainable, & profitable industry while reducing risks and environmental impact.

VALUE PROPOSITION

- Saves ~4,950 kWh/cycle (~4.2 tCO_2e) by optimizing motor use.
- Cuts FCR 0.3–0.5 points, saving ~0.7–0.9 tCO_2e/acre.
- Reduces wastewater energy ~36.8 kWh/MLD/day.
- Improves yield 10–15% via hyperspectral grading.

END USERS

It serves aquafarmers, cooperatives, villages, communities, cities, and industries — from small pond operators to large water managers — with smart, modular IoT-, AI-, and robotics-based solutions for scalable water-quality management.

UNIT COST

- Automated Feeder-25,000 INR
- Water Quality Monitor and Sampling for 2 Ponds-80,000 INR
- Starter+Power Monitoring-10,000 INR
- Smart Check Tray-45,000 INR

FOUNDER

Minushri Madhumita
Amrita Jagatdeo

ODISHA

TECHNOLOGY READINESS LEVEL:

TRL: 9

IP DETAILS

Patent Number: 510507
Status: Granted
Patent Title: An automatic apparatus for use in aquafarming
Type: (Indian/International) Indian

DEPLOYMENT USED CASES

- **No of Units Deployed:**13 Aeration,8 Seabin,7 Monitoring
- **Locations Covered:** Mangalore,Odisha
- **Type of Funds:** CSR
- **Funding Agency:** BCKIC,JSW,CUMMINS
- **Beneficiaries Impacted:** Municipalities, communities, and local authorities through clean water, resource recovery, and reduced pollution.
- **Institutional Partnership:** Ministry of Housing & Urban Affairs.

ACHIEVEMENTS/ COMPLIANCES

- **Funds Raised:** Rs. 3.5 Cr from TDB, DST, KIIT TBI, IOCL, JSW, MeitY, BIRAC, SIDBI, MoHUA
- Won multiple national innovation awards, including recognition from Startup India, DST, and AI/IoT innovation platforms, highlighting their leadership in digital water technologies.

TECHNOLOGY VIDEO LINK

https://youtu.be/cL_214QnjZI

CORE SDGs ALIGNED

Farms 2 Fork Technologies Pvt. Ltd.

www.cultyvate.com

Agriculture & Allied Areas

A Method and a System for Regulating a Flow of Water

PRODUCT

DESCRIPTION

Empowering small and marginal farmers with affordable technology that provides actionable insights to optimize water and minimize chemical use in rice and sugarcane farming. The solution enhances crop health monitoring, improves yield predictability, and supports timely interventions through easy-to-use digital tools. By reducing input costs and promoting sustainable practices, it helps farmers increase profitability, build climate resilience, and adopt smarter, data-driven agriculture.

VALUE PROPOSITION

- Technology-Driven Solutions
- Improved Productivity and Efficiency
- Resource Optimization
- Remote Management and Automation
- Comprehensive Data Collection
- Cost and Environmental Benefits

END USERS

Small and marginal farmers, FPOs

FOUNDER
Mallesh T M, Bhavana

KARNATAKA

TECHNOLOGY READINESS LEVEL:

TRL: 9

IP DETAILS

India Patent No.: 429197

Status: Granted w.e.f 31-03-2021

Title: A method and a system for regulating a flow of water

DEPLOYMENT USED CASES

- **No of Units Deployed:**1
- **Locations Covered:** Tamilnadu
- **Type of Funds:** Grant
- **Funding Agency:** Hindustan Unilever Foundation, Villgro, and CIPT
- **Beneficiaries Impacted:** Small and marginal farmers

ACHIEVEMENTS/ COMPLIANCES

- **Funds Raised:** IIMB & NSRCEL, CISCO CIIE, MSME, Villgro
- **Major Partnership Forged:** ICAR, IRRI, CIPT, IFFO, Selco Foundation, Villgro
- **Awards/Recognitions Received:**
  - ✓ Elevate: Winner of Karnataka's Elevate100 in 2018
  - ✓ NITI Aayog: WOMEN TRANSFORMING INDIA AWARD 2021

TECHNOLOGY VIDEO LINK

https://youtu.be/8Xp-csv1JZE

CORE SDGs ALIGNED

LiqSure Systems Pvt. Ltd.

www.liqsure.com

Water & Sanitation

Innovative wastewater Treatment Solutions

PRODUCT

DESCRIPTION

Liqsure has developed modular and portable effluent treatment system suitable for industries in urban setting. It is able to treat COD in water at least 10x faster than traditional systems and does not require any chemical, filter, or membrane to purify the wastewater. It works on the principle of cavitation, where micro-bubbles are generated by the pressure difference. These micro-bubbles subsequently grow and collapse violently to release large amounts of energy enough to create chemical radicals, which kills the microorganisms and destroys organic chemicals present in the wastewater

VALUE PROPOSITION

- Very efficient, faster & economical and sustainable treatment.
- Low O&M.
- No chemical usage for treatment.
- No sludge generation.
- Very less footprint.

END USERS

Major projects include STPs and ETPs across India — 50 KLD units at Jain College (Hubli & Belagavi), 10 KLD plants at BMC and PCMC offices, a 200 KLD STP at Suchirindia's Tales of Greek Estate, a 1 MLD setup at RVM Institute, and installations for Reliance, GITS Foods, Kirti Pressing, and Cristol across key cities.

FOUNDER
Dr. Sarjerao Doltade

TELANGANA

TECHNOLOGY READINESS LEVEL:

TRL: 9

IP DETAILS

Patent Number: 444,015
Status: Granted
Patent Title: Water disinfecting Plate device
Type: Indian

DEPLOYMENT USED CASES

- **No. Of Units Deployed:** 11
- **Location Covered:** 3 states in India (MH, TG & KA)
- **Type Of Funds:** Grant Funding
- **Funding Agency:** SISF Grants
- **Beneficiaries Impacted:** 11
- **Institutional Partnership:** IIT Hyderabad, RICH

ACHIEVEMENTS/ COMPLIANCES

- **Funds Raised:** 25L seed fund (IITH), 30L seed fund (SISF through RICH)
- **Major Partnership Forged:** NA
- **Awards/Recognitions Received:** Amrut 2.0 by Ministry of Housing and Urban Affairs, GOI, Shark Tank Solapur Golden award, Special Invitee to the President House on the occasion of Republic day 2025

TECHNOLOGY VIDEO LINK

https://drive.google.com/file/d/1DQK_6EKxcdE1RP_QW7LnNpaC2yw6n_Y6/view?usp=sharing

CORE SDGs ALIGNED

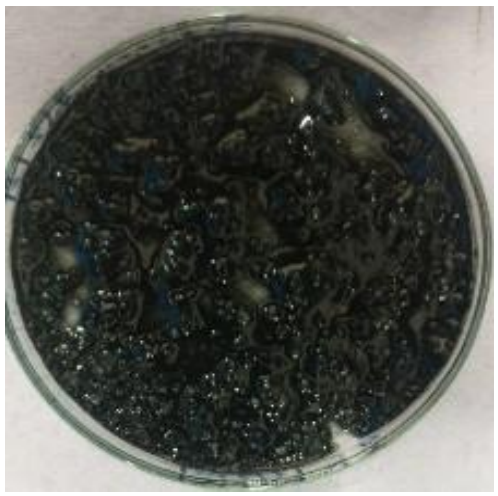
REVY Environmental Solutions Pvt. Ltd.

www.revy.co.in

Agriculture & Allied Areas

A process patented technology for the production of anaerobic granulated sludge designed for rapid commissioning & performance enhancement of industrial & municipal wastewater treatment systems.

PRODUCT



DESCRIPTION

REVY Environmental Solutions offers innovative products and services designed to optimize the operations of wastewater treatment units as well as biogas plants. With a focus on environmental sustainability and business efficiency, REVY delivers value-driven outcomes that empower their clients to achieve long-term success. Their solutions enhance process stability, boost energy recovery, and reduce operational costs while ensuring compliance with environmental standards. By integrating advanced biotechnology and on-ground technical support, REVY helps industries and municipalities achieve cleaner, more efficient, and future-ready waste management systems.

VALUE PROPOSITION

- 26x faster start-up of UASB/AD reactors
- 10x higher shock load tolerance
- 1.5x higher COD/BOD removal
- 2x higher methane yield
- Minimal sludge washout
- Highly compact design reducing CAPEX and OPEX

END USERS

Industrial ETPs/STPs Municipal STPs
Biogas & CBG Plants

FOUNDER
Dr. Vanita Prasad

GUJARAT

TECHNOLOGY READINESS LEVEL:

TRL: 7

IP DETAILS

Patent Number: 361404
Status: Granted
Patent Title: An economical process for preparation of anaerobic granules for wastewater treatment
Type: Indian + International (USA, South Africa, Malaysia, Europe)

DEPLOYMENT USED CASES

- **No. Of Units Deployed:** 40
- **Location Covered:** PAN India
- **Type Of Funds:** Grant
- **Funding Agency:** DBT-BIRAC, STBI, Venture Center
- **Beneficiaries Impacted:** 25,000; Indirect -15,00,000

ACHIEVEMENTS/ COMPLIANCES

- **Funds Raised:** 1.4 Cr, Funding Agencies – STBI, EDC, FISE
- **Major Partnership Forged:** Grassroots Energies
- **Awards/Recognitions Received:** Winner of National Startup Awards 2021 Best Anaerobic Digestion/Biogas Support Service O&M company by WBA 2023 Winner of Sankalp awards in 2023 Winner of National Bio Entrepreneurship Competition (NBEC) - 2024 Winner of Rural Karnataka Water and Sanitation Sustainability Summit 2024

TECHNOLOGY VIDEO LINK

https://youtu.be/7UHc_wNLBYM

CORE SDGs ALIGNED

Fluid Analytics Pvt. Ltd.

www.fluidanalytics.ai

fluid analytics.ai
Intelligent Monitoring For A Healthier Planet

Water & Sanitation

A water analytics company helping solve urban water contamination

PRODUCT

DESCRIPTION

Fluid Analytics is an award-winning cleantech start-up, using cutting-edge technologies to help countries around the world tackle urban water pollution. The company's unique platform is deployed by cities to monitor the health of water infrastructure, the health of waterways (lakes, rivers, and coastlines), and public health. By combining real-time sensing, advanced analytics, and predictive intelligence, it empowers authorities to take timely interventions, prevent contamination events, and improve regulatory compliance. The platform supports smarter urban planning, enhances community wellbeing, and enables data-driven water governance at scale.

VALUE PROPOSITION

- Unified platform combining AI, robotics, and molecular biology.
- Detects leaks, contamination, & pathogens in real time.
- Continuous field monitoring with integrated data streams.
- Delivers actionable insights to prevent water loss & health risks.

END USERS

Brihanmumbai Municipal Corporation, Singapore PUB, Surat Smart City, Black and Veatch, NCL CSIR, Pune Municipal Corporation, Veolia (France), etc.

FOUNDER

Rathin Bhadra, Raja Bagchi

MAHARASHTRA

TECHNOLOGY READINESS LEVEL:

TRL: 3

DEPLOYMENT USED CASES

- **No. Of Units Deployed:** 5
- **Location Covered:** India, Singapore, USA, Chile, Canada, etc.
- **Type Of Funds:** Grant
- **Funding Agency:** Grants, Venture Capital
- **Beneficiaries Impacted:** 20.5 million population, 800 MLD treatment increase in project cities, etc.

ACHIEVEMENTS/ COMPLIANCES

- **Major Partnership Forged:** PKC, NCL CSIR, World Economic Forum, AIIMS, Deloitte, CITI Group, etc.
- **Awards/Recognitions Received:** Global Top Innovator Award, World Economic Forum 2024 Global Edison award Featured on BBC's People Fixing the World Imagine H2O Global Urban Water Challenge Winner NASSCOM Emerge 50 Winner

TECHNOLOGY VIDEO LINK

https://youtu.be/R7lSHNzpYGQ

CORE SDGs ALIGNED

Genepath Diagnostics India Pvt. Ltd.

www.genepathdx.com

GANGOTREE

Water & Sanitation

Detection and quantification of SARS-CoV-2 in wastewater

PRODUCT

DESCRIPTION

GenePath Diagnostics is a leading player in molecular diagnostics and genomic testing, operating as both a clinical diagnostics service provider and a developer and manufacturer of advanced diagnostic kits and platforms. With headquarters in Ann Arbor, Michigan, USA, and Pune, India, the company focuses on clinical diagnostics in areas such as infectious diseases, oncology, inherited genetic disorders, and pharmacogenetics, while also extending its expertise to environmental monitoring, veterinary testing and agricultural applications.

VALUE PROPOSITION

- Highly sensitive and specific
- Inbuilt control suitable for wastewater samples
- Can tolerate inhibitors present in wastewater samples
- Quantitative

END USERS

NCL, CCMB, TIGS, AIIMS Bhopal

FOUNDER
Dr. Nikhil Phadke

MAHARASHTRA

TECHNOLOGY READINESS LEVEL:

TRL: 8

DEPLOYMENT USED CASES

- **No. Of Units Deployed:** 110000
- **Location Covered:** 17 Institute/labs
- **Type Of Funds:** Private Funding
- **Beneficiaries Impacted:** Bangalore, Delhi & Pune city

ACHIEVEMENTS/ COMPLIANCES

- Won a major grant — GenePath secured a ₹ 2.5 crore grant from the United States–India Science & Technology Endowment Fund (USISTEF) to develop a cost-effective, highly sensitive mass-scale detection platform for Human Papilloma Virus (HPV), targeting scalable cervical-cancer screening.
- Attracted institutional investment — in a recent fund raise they secured US $1.85 million (from investors including Snow Leopard Ventures and Saama Capital), with a reported valuation of roughly ₹ 23.7 crore.
- Provided clinical diagnostic services at scale: as of recent years, their NABL-approved Pune laboratory has processed large volumes of clinical and research samples, serving both Indian and international clients.

CORE SDGs ALIGNED

Lambert Technovation Pvt. Ltd.

www.lambertwater.co

Water & Sanitation

Lambert Technovation develops decentralized, modular & rapid chemical-free solutions using electrochemical cells to treat & reuse wastewater across various industrial streams, cooling towers & municipal sewage.

PRODUCT

DESCRIPTION

Lambert Water, a Thane-based start-up, develops sustainable, decentralised, and modular systems for industries, buildings, and municipalities. Its patented Water Battery and Softion reactor integrate advanced electrochemical processes and electromagnetic induction to deliver rapid, chemical-free treatment and safe non-potable reuse. The technology reduces energy consumption, lowers operational costs, and minimizes sludge generation while ensuring high system reliability. By enabling compact, plug-and-play deployment, Lambert Water supports scalable wastewater management and empowers organisations to meet stringent environmental norms with ease.

VALUE PROPOSITION

- Enables silent, odourless, treatment of wastewater, with IoT-enabled real-time compliance.
- Cuts chemicals by 60% and GHG emissions by 50%.
- Produces 40% less sludge & needs 75% less space than conventional systems.

END USERS

Builders Architects Contractors Industries
Data Centres Urban Local Bodies

FOUNDER
Abhijeet Kumar

MAHARASHTRA

TECHNOLOGY READINESS LEVEL:

TRL: 8

IP DETAILS

Patent Number: 202531012468
Status: Published
Patent Title: A Wastewater Treatment System And A Method Thereof
Type: Indian

DEPLOYMENT USED CASES

- **No. Of Units Deployed:** 4
- **Location Covered:** Mumbai, Thane, Pune
- **Type Of Funds:** Grant
- **Funding Agency:** IIT Madras, Social Alpha, NITI Aayog, DST, SPTBI

ACHIEVEMENTS/ COMPLIANCES

- **Funds Raised:** INR 85 lakhs; Social Alpha, ICCW, NITI Aayog, DST
- **Major Partnership Forged:** Social Alpha, ICCW, MAGIC, SPTBI
- **Awards/Recognitions Received:** Climate Smart Innovation (Solar Decathlon India), 2025; Startup Maharathi Award in the Climate Category at Start-up Mahakumbh 2025; Sustainability Open Innovation Challenge, Singapore

TECHNOLOGY VIDEO LINK

https://youtu.be/VINqyqcrhYc

CORE SDGs ALIGNED

Tellus Habitat

www.tellushabitat.com

Wastewater Treatment

R3H2O: Smart Decentralized Wastewater Treatment for Small Communities and Commercial Establishments

PRODUCT

DESCRIPTION

Tellus Habitat has developed a smart, decentralized wastewater treatment system (named R3H2O) to treat municipal sewage in the 5–50 KLD range designed for residential communities, resorts and hotels, and industries. The treated wastewater is suitable for various non-potable applications such as horticulture, car washing, flushing, and floor cleaning, offering a compact, energy-efficient, and low-maintenance solution that supports sustainable water reuse.

VALUE PROPOSITION

- Enables silent, odourless treatment of wastewater, with no use of chemicals.
- Eliminates the need for manual operations, due to fully automated processes.
- Lowered energy consumption (0.5 – 0.75 kWh per KL treated)
- 40% reduced sludge production compared to conventional systems

END USERS

Builders, Architects, Contractors, Industries for Sewage, Urban Local Bodies

UNIT COST

7.5 – 40 lakhs INR, depending on capacities ranging from 5 to 50 KLD sewage treatment plants.

FOUNDER

Dr Seema Sukhani
Naveen Janardhana

KARNATAKA

TECHNOLOGY READINESS LEVEL:

TRL: 9

IP DETAILS

Patent Number: 202541070273
Status: Filed
Patent Title: Method & System for automatically controlling operation of electro-mechanical devices In wastewater treatment system
Type: Indian

DEPLOYMENT USED CASES

- **No of Units Deployed:** 35+
- **Locations Covered:** Tamil Nadu, Kerala, Karnataka, Goa, Gujarat, Rajasthan
- **Residential and Commercial:** Saint Gobain, Prestige Group, Century
- **Government and NGO:** UNICEF, AMRUT (Ministry of Housing & Urban Affairs)

ACHIEVEMENTS/ COMPLIANCES

- Awards/Recognition – Stanford Spark, National Bio-entrepreneurship Contest, Infosys Women Leadership Award, FICCI (2nd Prize – Innovation in Water)
- Major Partnerships Forged – UNICEF, Ministry of Housing and Urban Affairs, Goa State Pollution Control Board, Social Alpha, Forge Innovation and Ventures.

TECHNOLOGY VIDEO LINK

https://www.youtube.com/watch?v=VkSMLeemQKE

CORE SDGs ALIGNED

WaterApp Technologies Pvt. Ltd.

www.waterapp.in

Water & Sanitation

IoT-Driven Smart Water Management for Sustainable, Cost-Efficient Infrastructure

PRODUCT

DESCRIPTION

WaterApp Technologies is an India-based innovator in IoT-powered water management solutions, helping housing societies, industries, hotels, hospitals, and institutions monitor, automate, and optimize their entire water infrastructure. With 300+ active installations across Pune, Mumbai, and other cities, WaterApp delivers proven savings of 10–25% in water, energy, and manpower costs, backed by robust in-house hardware, reliable cloud connectivity, and dedicated local support.

VALUE PROPOSITION

- End-to-end IoT automation enabling real-time monitoring, leak detection, and tank-level optimization.
- Proven 10–25% savings in water, energy, and manpower through data-driven control and predictive insights.
- Reliable in-house hardware + strong local support.

END USERS

Kumar Properties, Kalpataru Limited, JBM Auto Limited, Bisleri International Pvt. Ltd., Haier Appliances India, Central Railways, Mumbai Division, Lonavla Railway Colony, Sanjeevani Group of Institutes + 300 societies.

FOUNDER
Parag Thakur

MAHARASHTRA

TECHNOLOGY READINESS LEVEL:

TRL: 9

DEPLOYMENT USED CASES

- **No. Of Units Deployed:** 3000
- **Location Covered:** (Pune, Mumbai)
- **Type Of Funds:** Grant

ACHIEVEMENTS/ COMPLIANCES

- **Major Partnership Forged:** Builders, Kalpataru Limited, Jio Society for all their upcoming projects
- **Awards/Recognitions Received:** Selected for Startup seed fund by Ideas to Impacts Incubator – Oct 23 Among top 3 start ups at COEP Start up Fest 24 Among 30 top start ups at BITS Conquest 24 Partner with Kumar Builders, Kalpataru Limited, Jio Society for all their upcoming projects

TECHNOLOGY VIDEO LINK

https://youtu.be/VDc1KDvVe9I

CORE SDGs ALIGNED

Smart Graded Water Supply Grid

www.jckif.iitj.ac.in

Water & Sanitation

AI-powered smart water grid for scalable, energy-efficient, and reliable rural water delivery.

PRODUCT

DESCRIPTION

AI-driven, self-optimizing water grid that cuts waste by 40% and energy use by 30%, with plug-and-play scalability for Jal Jeevan Mission. The system uses real-time sensing, intelligent automation, and predictive algorithms to balance supply-demand, detect faults instantly, and enhance service reliability. Its modular design enables rapid deployment across villages, ensuring efficient, equitable, and sustainable drinking water delivery at scale.

VALUE PROPOSITION

- AI-driven, self-optimizing water grid that cuts waste by 40% and energy use by 30%, with plug-and-play scalability for Jal Jeevan Mission

END USERS

Institutional campuses, urban/rural water authorities, and industrial complexes needing smart, sustainable water management solutions aligned with Jal Jeevan Mission and SDGs.

FOUNDER
Dr. Shobhana Singh

RAJASTHAN

TECHNOLOGY READINESS LEVEL:

TRL: 7

DEPLOYMENT USED CASES

- **No. Of Units Deployed:** 1
- **Location Covered:** IIT Jodhpur campus
- **Type Of Funds:** Grant
- **Funding Agency:** JCKIF
- **Beneficiaries Impacted:** Students, residents, and institutional stakeholders.

ACHIEVEMENTS/ COMPLIANCES

- **Funds Raised:** Awards/Recognition: Completed pilot with stakeholder engagement. Aligned with Jal Jeevan Mission.
- **Major Partnership Forged:** JCKIF, IIT Jodhpur
- **Awards/Recognitions Received**: Awards/Recognition: Completed pilot with stakeholder engagement. Aligned with Jal Jeevan Mission.

CORE SDGs ALIGNED

JSP Enviro Pvt. Ltd.

www.jspenviro.com

Wastewater Treatment

Bio-Electrochemical Anaerobic Digestor System (BEADSTM)

PRODUCT

DESCRIPTION

Decentralized, energy-efficient solution for secondary treatment of industrial wastewater with high organic load for small and micro industries with lower operating costs. BEADS uses microbial fuel cells (MFCs) wherein specially enriched microorganisms degrade contaminants and recover energy in the process, offering a low-sludge, low-chemical, and highly sustainable treatment pathway that improves reliability and reduces long-term operational burdens for industries.

VALUE PROPOSITION

- Energy Use: Blower operations reduced by 30–50%, significantly cutting electricity.
- Chemical Use: Pollutant removal lowers chemical flocculants required by 60–80%.
- Sludge Handling: Sludge generation reduced by 70%, lowering disposal effort and cost.
- Carbon Emissions: Overall reductions save about 82 tons CO_2 annually.

END USERS

Pharma Manufacturers, Textile Industries, Food and Beverages: Distillery

UNIT COST

- 5–35 lakhs INR, depending on capacities ranging from 10 to 100 KLD effluent treatment plants.

FOUNDER

Dr Priyadharshini Mani
Dr Fidal Kumar

TAMIL NADU

TECHNOLOGY READINESS LEVEL:

TRL: 9

IP DETAILS

Patent Number: 202541007828
Status: Application filed
Patent Title: Bio-electrochemical system for treating wastewater and an assembly method thereof
Type: Indian

DEPLOYMENT USED CASES

- 10 m3/day BEADSTM installed in Erode in a dyeing factory reduced the cost by 55% for the secondary process.
- 50 m3/day BEADSTM installed in SIPCOT, Perundurai, in a textile processing factory, reduced the cost by 40% for the secondary process, with a return on investment in 2-3 years.

ACHIEVEMENTS/ COMPLIANCES

- First company to achieve the scale-up of microbial fuel cell concept for Industrial effluent in India
- 2nd Prize, Climate Launchpad, Scotland, UK
- **Institutional Partnership:** IIT Madras, Social Alpha, Fashion for Good, Circular Apparel Innovation Factory (CAIF)

TECHNOLOGY VIDEO LINK

https://jspenviro.com/project-ii/

CORE SDGs ALIGNED

Solinas Integrity

www.solinas.in

Water Management

Endobot, Swasth AI Platform, Homosep

SOLINAS

PRODUCT

DESCRIPTION

Endobot is a crawler robot designed for internal condition assessment and defect detection in water and sewer pipelines ranging from 90 mm to over 2000 mm in diameter, helping utilities locate leakages, identify contamination points, and evaluate structural integrity across pipeline networks. Its companion platform, SwasthAI, uses advanced ML and AI to analyze Endobot-generated data and deliver actionable insights for predictive maintenance and efficient network management. Complementing these technologies, HomoSep provides a complete, mechanized solution for safe septic tank and sewer cleaning, supporting the elimination of manual scavenging and improving worker safety and sanitation outcomes.

VALUE PROPOSITION

- Endobot – can detect leaks, cracks, contamination in real-time, in pipelines ranging from 90mm to 2000mm. It inspects ~500m through a single entry point, eliminating the need for repeated digging.
- HomoSep – cleans a 5KL tank in 15 – 30 minutes, with a 360 degree clean capability, ensuring rapid, efficient & advanced manhole & septic tank cleaning.

END USERS

Urban Local Bodies, Water Departments, Sanitation Departments, Industries, Utility Companies

UNIT COST

- Endobot – INR 25 – 40 lakhs, depending on the type of robot being deployed based on the pipeline's diameter
- Homosep – INR 40 lakhs onwards

FOUNDER

Divanshu Kumar
Moinak Banerjee

TAMIL NADU

TECHNOLOGY READINESS LEVEL:

TRL: 9

IP DETAILS

Patent Number: 202341029592; 202341017985; 453309
Status: Published; Under Inspection; Granted
Patent Title: Pipeline crawler with 3D mapping and advanced sludge-mixing blade technology.
Type: Indian

DEPLOYMENT USED CASES

- **No. Of Units Deployed:** Endobot – 25; Homosep – 15
- **Location Covered:** Tamil Nadu, Maharashtra, Karnataka, Delhi, Kerala, Haryana, Goa
- **Institutional Partnership:** Start-up Tamil Nadu, Ministry of Housing & Urban Affairs, IIT Madras, Social Alpha

ACHIEVEMENTS/ COMPLIANCES

- **Awards/Recognition:** YourStory (Top 30 Start-ups, 2022); The Nudge Aashirvad Water Challenge (Top 2)
- Major Partnerships Forged – Veolia, Suez, L&T, WABAG, JUSCO, Hyundai, Tata Motors, Volvo, Safai Karmachari Andolan

TECHNOLOGY VIDEO LINK

Endobot - https://www.youtube.com/watch?v=RMo60AjxGwY
Homosep - https://www.youtube.com/watch?v=FydVfg5z29Q

CORE SDGs ALIGNED

ECOSTP Technologies ℗ Ltd

www.ecostp.com

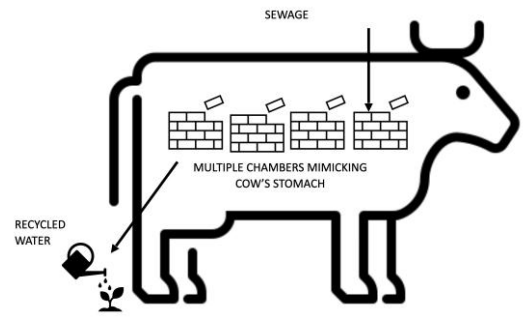
Net Zero Sewage Treatment

ECOSTP: Biomimetic, Power-Free Sewage Treatment Inspired by the Cow's Stomach

PRODUCT

DESCRIPTION

Net Zero Sewage Treatment Technology: Rediscovering Nature's Genius in treating Sewage - the cow's stomach. Our unique patented technology treats sewage in a decentralised, self- sustainable way in underground chambers without power, chemicals or human intervention. Using Biomimicry, regenerative innovation inspired by nature, the ECOSTP utilises functional principles and strategies of microorganisms and ecosystem found in a cow's stomach.



VALUE PROPOSITION

- No Power Required
- No Chemicals Required
- No Operators Required
- Complying with NGT/PCB norms
- Trusted by 350+ clients across India, Bangladesh, and the Maldives.

END USERS

Apartments & Villas, Factories, and Educational Institutions

UNIT COST

- 5.5 Lakhs (5 KLD) to 20 Lakhs (1000 KLD)

FOUNDER
Tharun Kumar

KARNATAKA

TECHNOLOGY READINESS LEVEL:

TRL: 9

IP DETAILS

Patent Number: 317606
Status: Granted (Indian Patent Office)
Patent Title: A system for removal of pathogens from water
Type: Utility Patent

DEPLOYMENT USED CASES

- **No. Of Units Deployed:** 3000
- **Location Covered:** (Pune, Mumbai)
- **Type Of Funds:** Grant
- **Apartments and Villas:** Adarsh Developers, Brigade Group, Adani Realty **Factories:** Tata Steel, Berger Paints, ArcelorMittal
- **Educational Institutions:** IIT Kharagpur, IIT Jammu, Chinmaya University

ACHIEVEMENTS/ COMPLIANCES

- 7 billion litres of sewage transformed into good water
- Breakthrough novel bacteria co-developed with IIT Jammu
- NASSCOM recognized DeepTech innovator
- 25+ client stories proving real-world performance

TECHNOLOGY VIDEO LINK

https://www.youtube.com/watch?v=FWoqb5tOTpY

CORE SDGs ALIGNED

Urdhvam Environmental Technologies Pvt. Ltd.

www.borecharger.com

AgriTech, Water, ClimateTech

Urdhvam
Environmental Technologies
Private Limited

BoreCharger: Scientific Borewell Recharging Technology for Sustainable, Long-Term Groundwater Yield

PRODUCT

DESCRIPTION

Many borewells pump from deep aquifers that refill slowly, and the casing pipe blocks the shallow, rain-fed aquifer layer. BoreCharger makes small perforations at correct depths to this casing pipe of existing low yielding or dried up borewell, from inside, so filtered water from the top layer can enter inside borewell, flow down and recharge the deeper aquifers. BoreCharger increases duration, yield and quality of borewell water supply, making it sustainable. BoreCharger increases farmer income and makes habitations water secure.

VALUE PROPOSITION

- Increases yield of borewells
- Artificial injection of 2 to 80 Lac Litres of water in the borewell/year
- Increase in duration of water supply by Additional 1 to 6 more months
- Improved irrigation & drinking water Quantity & Quality
- Lesser vulnerability of farmers due to weather shocks

END USERS

B2C : Farmers, House Owners, Apartments
B2B/B2B2C : Farmer Collectives, Milk Federations, FPOs, SHGs, Sugar Industries, NGOs , CSRs, Environmental Consultancies, Agri Universities, Townships, Industries, Hotels & Resorts
B2G: Gram Panchayats, Line Departments, ZPs, Municipal Corporations

UNIT COST

- Rs 50000 to Rs 70000

FOUNDER
Rahul Bakare

MAHARASHTRA

TECHNOLOGY READINESS LEVEL:

TRL: 8

IP DETAILS

Patent Number: 397449
Status: Granted
Patent Title: Borewell Recharge Enhancement Tool And Method of Borewell Recharging Operation
Type: Process & Design

DEPLOYMENT USED CASES

- **No. Of Units Deployed:** 3000
- **Location Covered:** (Pune, Mumbai)
- **Type Of Funds:** Grant

ACHIEVEMENTS/ COMPLIANCES

- **Government :** Ministry of Urban Development-(ASCI) AMRUT Program, (Government of Maharashtra), Niti Ayog
- **International Awards :** DBS Bank-Singapore, Columbia Global Center, Climate Launch Pad
  National Level : FICCI, Pune International Center, Rotary International

TECHNOLOGY VIDEO LINK

https://www.youtube.com/watch?v=vP-HI-gH5qA

CORE SDGs ALIGNED

WSAFE Sustainability Services Pvt. Ltd.

www.wsafess.com

Climate Tech / Water Sector

WSAFE-NBS: Nature-Based Phyto-Remediation Technology for Restoring Polluted Waterbodies into Self-Sustaining Ecos

PRODUCT

DESCRIPTION

WSAFE-NBS is a nature-based Phytoecoremediation solution that restores polluted pond, lake, drain and river using proprietary botanical extract formulation dosing to treat wastewater naturally without chemicals or energy. It rejuvenates local ecology, enhances groundwater recharge, and promotes carbon sequestration, soil carbon fixation, and GHG emission mitigation, transforming stagnant water bodies into self-sustaining ecosystems that deliver clean reusable water and long-term climate resilience.

VALUE PROPOSITION

- Nature-Based: No chemicals, no electricity, and zero sludge generation.
- Cost-Effective: Near-zero capital investment with consistently low operating costs.
- In-situ Treatment: No dredging, no infrastructure, and no water diversion needed.
- Reusable Water: Produces clean water suitable for irrigation and aquaculture use.

END USERS

Gram Panchayat, ULB, Municipal Corporations, Nagar Nigam,NGO,CSR/CER …..

FOUNDER
Atul Mohan

DELHI

TECHNOLOGY READINESS LEVEL:

TRL: 7

DEPLOYMENT USED CASES

- Hassanpur Village Pond, Murthal, Haryana
- Nagli Wazidpur Pond, Noida, UP
- Sadpura Village Pond, Faridabad, Haryana
- Ram Ghat, Mandakini River,Chitrakoot, MP
- Bhikapurwa Pond, Bakshi Ka Talab, Lucknow, UP
- Rudahi II Ponf, Bakshi Ka Talab, Lucknow, UP

ACHIEVEMENTS/ COMPLIANCES

- HDFC Parivartan Grant, Winner Climate Innovation Challenge, IISER Pune, Water Innovate Challenge 1st Position Embassy or Israel & Haryana Govt….

TECHNOLOGY VIDEO LINK

https://youtu.be/1HvWxe8z4Jc?si=ABJAP3sHnjZOuXOz

CORE SDGs ALIGNED

Trinity International

www.trinityalgae.com

Industrial Effluent Treatment (Oily Sludge)

Process of microalgae based Phycoremediation for treatment of Oily sludge

PRODUCT

DESCRIPTION

Oily sludge is a hazardous industrial waste generated during the storage/refining of crude oil. It contains oil, heavy metals, and other toxic compounds. This thick waste forms sticky mixtures that are hard to clean. For every 500 tons of oil processed, 1 ton of oily sludge is generated. If not treated properly, it can pollute soil and water, harm plants and animals, and affect human health. Common methods like incineration or land filling are costly and environmentally non-sustainable. That's why it is important to find better & greener ways to treat and manage oily sludge safely. Phycoremediation is one of the best alternative which uses microalgae to biologically digest and detoxify pollutants. This sustainable technology transforms oily sludge waste into cleaner byproducts with environmental and economic benefits.

VALUE PROPOSITION

- More than 95% of TPH reduction, proven scalable from lab to pilot
- Seamless ETP integration for refinery wastewater treatment
- Aligned with ESG and SDGs (Net-Zero, SDG 6,12, 13, 3 and 7)
- Cost-saving and low-carbon, creates value by algal products

END USERS

Oil Refineries/ Oil wells

UNIT COST

- 10-12 Cr per annum for 500 Tons of sludge at a fully functional treatment plant

FOUNDER
Sukhdev Singh

DELHI

TECHNOLOGY READINESS LEVEL:

TRL: 9

IP DETAILS

Patent Number: 573033
Status: Awarded
Patent Title: Process of Microalgae based Phycoremediation for treatment of Oily Sludge
Type: Process Patent (IND)

DEPLOYMENT USED CASES

- **Numaligarh Refinery Limited, Golaghat, Assam**

ACHIEVEMENTS/ COMPLIANCES

- Achieved CPCB compliance with TPH levels below 0.5%
- Patent Awarded

TECHNOLOGY VIDEO LINK

https://trinityalgae.com/industrial-case-studies

CORE SDGs ALIGNED

Trinity International

www.trinityalgae.com

Wastewater Treatment

Wastewater treatment using Phycoremediation a microalgae based technology

PRODUCT

DESCRIPTION

Phycoremediation is a sustainable, nature-based technology that utilizes microalgae consortia to restore polluted and acidic rivers. Through photosynthetic processes, microalgae absorb heavy metals, neutralize acidity, and improve dissolved oxygen levels—reviving aquatic ecosystems while maintaining ecological balance. This technology has been successfully demonstrated in the rejuvenation of highly acidic rivers Kyrhuhkhla and Lunar in East Jaintia Hills, Meghalaya, where traditional methods failed to yield sustainable recovery.

VALUE PROPOSITION

- Eco-restoration of the rivers using native algae for natural water purification
- Zero chemical and mechanical treatment used
- Sustainable with low-cost, low-energy, and self-sustaining system.
- Engages and benefits local stakeholders
- Easily adaptable for different polluted river systems

END USERS

Polluted waterbodies

UNIT COST

- Approximately 50% of the conventional treatment cost

FOUNDER
Sukhdev Singh

DELHI

TECHNOLOGY READINESS LEVEL:

TRL: 6

DEPLOYMENT USED CASES

- River Kyrhuhkhla
- River Lunar, Sonarpur
- Drains falling into River Bhadrawatii, Karauli, Rajasthan
- Drains to Mausam River, Nashik
- Wards Lake, Shillong, Meghalaya
- Pond Civil Lines, Ayodhya
- Laksmi Talab, Jhansi, UP
- Mainath Pond, Near Aligarh, UP

ACHIEVEMENTS/ COMPLIANCES

- pH improvement across treated river stretches using continuous algal dosing
- Recognized by CPCB, MSPCB, and MoEFCC for effective implementation

TECHNOLOGY VIDEO LINK

https://trinityalgae.com/riverlp-case-studies

CORE SDGs ALIGNED

TADOX- TERI Pvt. Ltd.

www.teriin.org

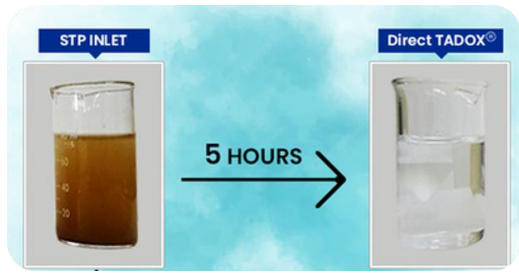
Water & Sanitation

Advanced Oxidation Technology For Industrial Wastewater Treatment

PRODUCT

DESCRIPTION

TERI's TADOX® is a groundbreaking wastewater treatment innovation that uses UV-photocatalysis to strip away color, organic pollutants, and persistent toxins—making it easy for industries to reuse water, cut sludge, slash chemical use, and edge closer to cost-effective Zero Liquid Discharge. It delivers faster treatment cycles, reduces energy demand, integrates seamlessly with existing infrastructure, and offers a scalable, future-ready pathway for industries committed to sustainability and regulatory compliance.



VALUE PROPOSITION

- Eco Friendly indigenous technology to treat municipal Sludge/ highly polluted industrial wastewater/ open Drains.

END USERS

Infrastructural projects, townships, commercial complexes, green buildings, and smart cities

FOUNDER
Dr. Nupur Bahadur

DELHI

TECHNOLOGY READINESS LEVEL:

TRL: 9

DEPLOYMENT USED CASES

- **No of Units Deployed:** 1
- **Locations Covered:** Kanpur
- **Type of Funds:** CSR

ACHIEVEMENTS/ COMPLIANCES

- TADOX® technology adopted by an MSME for a 10 KLD plant at TERI Gurugram; selected for Namami Gange pilot trials and sector augmentation.

TECHNOLOGY VIDEO LINK

https://youtu.be/WSWBobhaUnM

CORE SDGs ALIGNED

Aqualine Bhungru Pvt. Ltd.

www.aqualinebhungru.com

Water & Sanitation

A revolutionary indigenous groundwater recharge system enabling deep aquifer recharge, drought-proofing, and sustainable irrigation for marginal farmers.

PRODUCT

DESCRIPTION

Addressing groundwater depletion and desertification in drought-prone, semi-arid regions (e.g. Jharkhand). A revolutionary indigenous groundwater recharge system enabling deep aquifer recharge, drought-proofing, and sustainable irrigation for marginal farmers. The solution captures rainwater efficiently, filters it naturally, and channels it to deeper layers, restoring depleted water tables. By strengthening climate resilience, reducing dependence on erratic monsoons, and supporting year-round crop cultivation, it empowers rural communities with long-term water security and improved livelihoods.

VALUE PROPOSITION

- Deep recharge of aquifers (300–1,000 feet)
- Low maintenance & eco-friendly design
- Improves soil moisture & crop yield resilience
- Operated and maintained by local communities

END USERS

Smallholder Farmers Schools & Health Centers Government Projects & CSR Programs

FOUNDER

Rathin Bhadra, Raja Bagchi

JHARKHAND

TECHNOLOGY READINESS LEVEL:

TRL: 9

DEPLOYMENT USED CASES

- **No. Of Units Deployed:** 5
- **Location Covered:** Ulihatu, Rani Pahadi, Basbona, Gaushala Sukurhutu Kanke (Jharkhand)
- **Type Of Funds:** Private Funding
- **Funding Agency:** NA
- **Beneficiaries Impacted:** 500+ Farmers, 500+ Students, SSB Jawans, Health Workers, Rural Communities

ACHIEVEMENTS/ COMPLIANCES

- Recognized at Jharkhand Innovation Forum Part of Aspirational District Projects Successfully used in tribal & rural settings

TECHNOLOGY VIDEO LINK

https://youtu.be/WGKqRkVeBZs

CORE SDGs ALIGNED