

Innovotek Private Limited

Our Journey towards Climate Resilience

Bridging Science & Sustainability

*Restoring Ecosystems · Building Climate Resilience ·
Contributing to India's Sustainable Future*





About Us...

Innovotek was incorporated in 2018 to mitigate the impacts of Climate change, enhance ecological services, restore biodiversity & increase livelihood support

Our customised & practical solutions, integrating SDGs, help clients from a varied spectrum to take up a carbon-neutral pathway.

45+

Projects Delivered

200+

Acres restored

2.5L+

Saplings planted
(Including 80K
mangroves)

15K

Tones of Carbon
Sequestered

30+

Active Clients

Our Purpose

Innovative

Cutting edge, practical solutions tailored to address every clients sustainability challenge

Technological

Leveraging geospatial, environmental & energy technologies for measurable impact.

Sustainable

Designed for long-term ecological, social & economic value



SDG 6



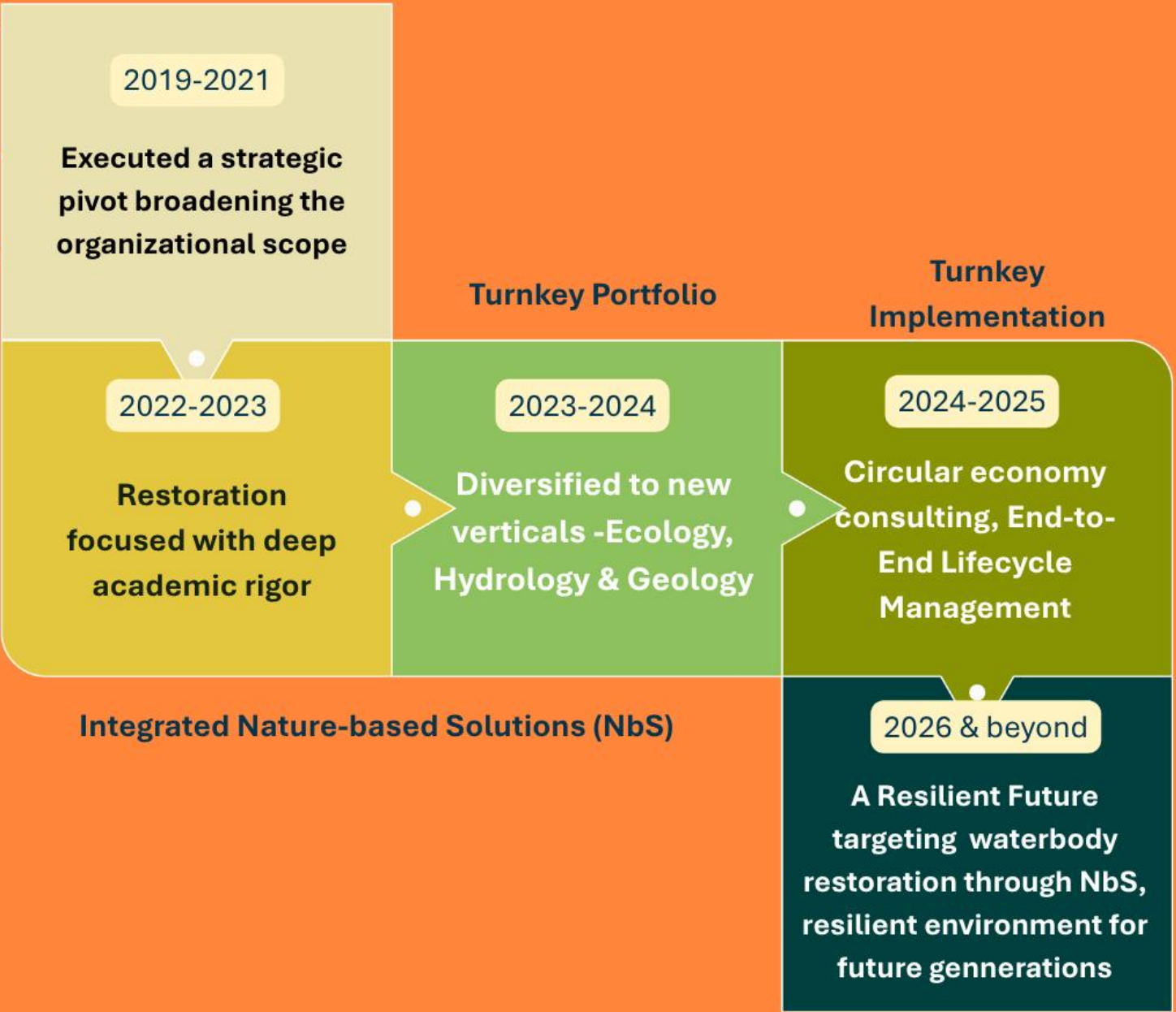
SDG 13



SDG 15

Our Journey So far...

Competency building



32

PROJECT HIGHLIGHTS



Aerial View of Adyar River

Preparation of Detailed Feasibility Report (DFR) for the Eco restoration of Adyar, Cooum and Buckingham Canal

Client / Organisation: Alluvium Consulting India

Key Outcome: Biodiversity assessment and restoration planning for two major River Basins – Adyar and Cooum, Chennai

Duration: Jan 2023 to Mar 2023



Kadapakkam Lake

Photo : Dr. Sridhar

Biodiversity Assessment of Kadapakkam Lake

Client / Organisation: Royal Haskoning Private Limited

Key Outcome: 3 stage biodiversity assessment of Kadapakkam lake; recommendations for minimal impact on the existing ecosystem during restoration phase and native saplings along river bund.

Duration: Aug 2024 to Jan 2027



Thirunindravur Lake

Preparation of DPR for Restoration, Development, & augmenting the additional source for water supply from 19 lakes in Chennai & Palar Basins

Client / Organisation: Vitya Consultants Private Limited

Key Outcome: Biodiversity & hydrological assessment of 19 Lakes along Palar river basin, Mapping the future & recommendations for water augmentation & ecological conservation

Duration: Feb 2025 to Mar 2025



Evaluation of NABARD funded Ecorestoration activities in Tiruvallur District under Forest Department

Client / Organisation: Tamil Nadu Forest Department – Tiruvallur Zone

Key Outcome: Evaluation & impact assessment of implemented soil & moisture conservation activities under NABARD Scheme in 5 territorial ranges of Tiruvallur Forest Department

Duration: Oct 2024 to Nov 2024



Bird & Biodiversity - BIDAR

Client / Organisation: Ministry of Defense, Air Force Station, Bidar

Key Outcome: Asses the avian diversity & local biodiversity that lead to air strike within 25 km radius of the airfield. Recommendations to prevent accidents in future.

Duration: Sep 2025 to Sep 2026

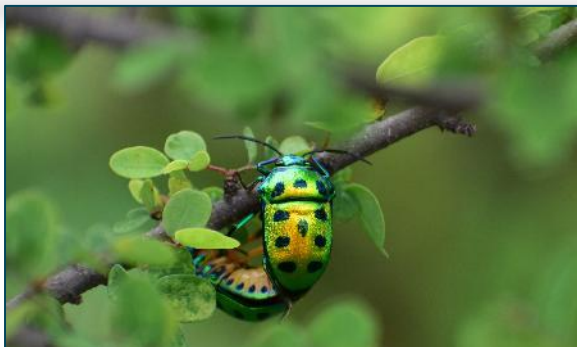


Preparation of Brief Document & Health Card for 120 Wetlands in TN

Client / Organisation: Tamil Nadu State Wetland Authority

Key Outcome: Assessing the ecological health of 120 wetlands that have been prioritized by TNSWA and recommend for conservation under RAMSAR convention

Duration: Aug 2025 to Jun 2026



Jewel Bug

Photo: Subha Meenakshi

Study of flora & fauna of Central Buckingham canal and preparation of Eco-restoration plan

Client / Organisation: Tamil Nadu Water Investment Company

Key Outcome: Biodiversity assessment of both flora and fauna. Recommendation of restoration plan for Buckingham canal with focus on Nature-based solutions.

Duration: Nov 2023 to Dec 2025



DPR for providing Integrated Storm Water Drains for Hosur City Municipal Corporation for Integrated Storm drains, rejuvenation of water bodies and sponge city/park concept

Client / Organisation: Voyants Solutions Private Limited. End Client – TUFISIL

Key Outcome: Biodiversity assessment & ecological status of 8 major lakes, 20 minor lakes & parks in Hosur. Recommendation for mitigations to reduce the impact of anthropogenic activities & climate change on the natural resources.

Duration: May 2024 to May 2025



Kosasthalaiyar river

Flora and fauna study for the Eco restoration of Kosasthalaiyar river from Karanodai Bridge to Ennore Creek

Client / Organisation: Voyants Solutions Private Limited. End Client - Project Development Grant Fund

Key Outcome: Baseline biodiversity assessment along the Kosasthalaiyar river. Recommendations for restoration and conservation of the riverine ecosystem.

Duration: Feb 2024 to Nov 2024



Integrating Blue-Green infrastructure in Urban Planning for Climate Change Adaptation and Mitigation in Chennai Metropolitan area (CMA)

Client / Organisation: Alluvium Consulting India, End Client – Chennai Metropolitan Development Authority (CMDA)

Key Outcome: Mapping of all Blue & Green elements, their boundaries and historic images; Asses Climate change impact in CMDA planning for blue green infrastructure. Recommendations for implementation of BGI on short term and long-term basis.

Duration: Oct 2023 to Aug 2024



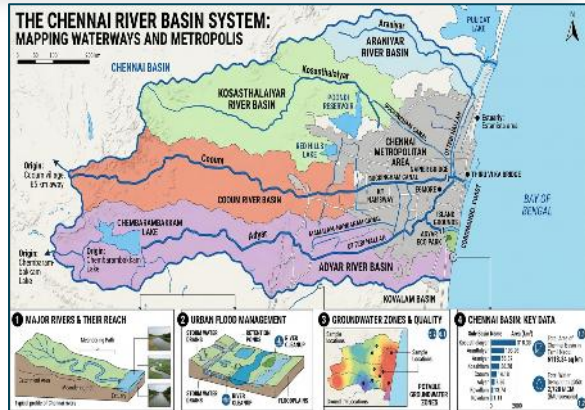
Aerial View of CPCL site, Amullavoyil, Chennai

Detailed report for green belt development at CPCL's land

Client / Organisation: Chennai Petroleum Corporation Limited

Key Outcome: Preparation of detailed green belt development plan for proposed site – revenue generation model using fruit bearing trees, detailed price estimates, and tenderable technical bid documents.

Duration: Sep 2023 to Oct 2024



The Strategic Impact Assessment (SIA) of urbanised river basins of Chennai for the preparation of flood control Master plan of Chennai Metropolitan Area.

Client / Organisation: Pacific Consultants Co Ltd. End Client – Greater Chennai Corporation (GCC)

Key Outcome: Baseline assessment of ecological condition of river basins in Chennai and recommendations for improved flood mitigation by strengthening and integrating the river basin.

Duration: Jun 2022 to Dec 2025



Consultancy service for DPR for the construction of Storm Water Drains in the Greater Chennai Municipal Corporation areas

Client / Organisation: Storm Water Drain Department, Greater Chennai Corporation

Key Outcome: Preparation of hydraulic design, flow of rainwater and engineering for the preparation of DPR for construction of Storm water drains in Zones 7, 11, 12 & 13 of GCC

Duration: Feb 2023 to Mar 2023



Electrical resistivity survey & infiltration test

Conducting topographic survey, percolation testing, drainage area calculations, community engagement, and site marking in ten sites in Chennai

Client / Organisation: TIDE

Key Outcome: Conducting topographic study, percolation testing, drainage study and community engagement in 10 sites in Chennai for implementation of raingarden as flood mitigation strategy in urban areas.

Duration: Jan 2025 to Mar 2025



EIA for Proposed TTRO at 9 Towns in Tamilnadu

Client / Organisation: Tamilnadu Water Investment Company

Key Outcome: Rapid EIA for the proposed Tertiary Treatment Reverse Osmosis Plant at 9 towns in Tamil Nadu

Duration: Oct 2025 to Mar 2026



Environmental Audit

Client / Organisation: Sri Eshwar College of Engineering

Key Outcome: Environmental Audit at Sri Eshwar College of Engineering, Coimbatore.

Duration: Jun 2025 to Jul 2025



Representative Image

Preparation of Environmental and social Impact Assessment (ESIA) report for establishing UGSS and 24 x 7 water supply projects in Kancheepuram Municipality

Client / Organisation: SSG Engineering

Key Outcome: WIA for soil, air, water, noise and vibration test in the proposed site. Social safeguard assessment with local communities.

Duration: Mar 2023 to Dec 2023



Environmental impact assessment study of Kadapakkam Lake and preparation of Management plan and monitoring

Client / Organisation: Mohamad Jamaluddin Contractors. End Client – Greater Chennai Corporation

Key Outcome: EIA study and Preparation of management plan for Kadapakkam Lake

Duration: Aug 2024 to Dec 2026



Environmental Monitoring in Puthucheeri Lake, Kovalam basin

Client / Organisation: Mohamad Jamaluddin Contractors. End Client – Greater Chennai Corporation

Key Outcome: Environmental and social management plant (ESMP) for the study conducted in three stages.

Duration: Mar 2026 to



Preparation of Integrated Blue Economy & Coastal Resilience Vision Master Plan for the entire shore in Nagapattinam District and DPR for the development of two Beaches in Nagapattinam District

Client / Organisation: Samanea Consultancy Private Limited, End Client – Tamil Nadu Urban Infrastructure Financial Services Limited

Key Outcome: Detailed plan for integrating blue economy and costal resilience, based on baseline environmental studies, for two beaches in Nagapattinam district, TN.

Duration: Jun 2024 to May 2025



Preparation of Master Plan for Chennai Snake Park Trust

Client / Organisation: Chennai Snake Park Trust

Key Outcome: Master plan for renovation and modernization of snake Park as per Central Zoo Authority guidelines

Duration: Jan 2024 to March 2024



Advisory services for DPR preparation of Perumbakkam and Velacherry lakes under river front development project

Client / Organisation: The Urban Lab

Key Outcome: Assessment of Soil, Water and ecological parameters including biodiversity. Site specific suggestions for restoration of both the lakes

Duration: Oct 2023 to Sep 2024



Quality assessment of planted saplings

Advisory services for Eco restoration of Ennore Creek

Client / Organisation: Tamil Nadu Forest Department Thiruvallur Range

Key Outcome: Consultation, planning, site assessment, environmental monitoring, documentation and monthly report, technical reporting and health assessment of saplings, geo-tagging of plantation along the Ennore Creek.

Duration: Jul 2023 to Jul 2025



Evaluation of Capacity Building and Human Recourse Development Scheme of CSIR

Client / Organisation: CRISIL

Key Outcome: Evaluate the impact assessment existing CSIR schemes (budgetary allocation, comparing with international schemes, outcome) for various categories and provide recommendations for forthcoming year

Duration: Dec 2023 to Aug 2024



Kilambakkam Climate Park

Client / Organisation: Samanea Consultancy Private Limited,

Key Outcome: Advisory services for implementing five different ecosystems that are prevalent in peninsular India; recommendations for native plant species, and other softscape ideas.

Duration: March 2024 to August 2024



Before & after photos of Adyar river bank

Eco Restoration of Adyar River Bank

Client / Organisation: Chennai River Restoration Trust (CRRT)

Key Outcome: Soil compaction, Pitting, Environmental monitoring, Native species plantation and maintenance along multiples banks of Adyar River

Duration: Nov 2021 to Oct 2024



Miyawaki plantation – Initial stage

Development of Green Belt and Maintenance of planted saplings inside CPCL Premises (Zone 1 & 2)

Client/ Organisation: Chennai Petroleum Corporation Limited (CPCL)

Key Outcome: Development of green belt using 20,000 native saplings in the land parcels allocated by CPCL and maintenance of planted saplings for 2 years

Duration: Feb 2025 to Mar 2028



Representative Image

Providing Landscape works in Aerohub Project, Sriperumbudur Taluk - Kancheepuram District

Client / Organisation: Mohamad Jamaluddin Contractors, End Client - TICEL

Key Outcome: Providing softscape, vertical walls, Pergolas, Sprinkler irrigation system

Duration: Jan 2026 to Jun 2026



Before & after images - vetiver plantation along bund

Development of Eco-Park and Miyawaki plantation in OSR land at SIPCOT Irungattukottai in Kancheepuram District

Client / Organisation: World Vision India

Key Outcome: Lawn development, Vettiver plantation,

Duration: Jan 2024 to Mar 2026



Plantation along Kadapakkam Lake bund

Lake bund Plantation using Native plant species along the Kadapakkam Lake bund, Manali, Chennai

Client / Organisation: Mohamad Jamaluddin Contractors. End client - Greater Chennai Corporation, funded by Asian Development Bank

Key Outcome: Soil compaction, sapling and nursery maintenance, native species planting and maintenance, creation of interpretation signages

Duration: Oct 2025 to Jun 2026



Miyawaki plantation

Miyawaki Plantation at SIPCOT OSR land at Sunguvarchathram in Kancheepuram district

Client / Organisation: World Vision India

Key Outcome: Site preparation, planting and maintenance of saplings for a period of two years 4 months

Duration: Dec 2022 to Mar 2025



Before & after images of Cooum river bund restoration

Ecorestoration of Cooum River from Chintadripet MRTS to Napier Bridge

Client / Organisation: RRP Infra Projects Limited

Key Outcome: Plantation of mangroves and mangrove associates on both banks (right & left side) of the Cooum river

Duration: Dec 2019 to Jun 2021



Pond restoration at Agaramthen – comparative photos

Pond Restoration at Agaramthen village in Kancheepuram District

Client / Organisation: World Vision India

Key Outcome: Lawn development, Vettiver plantation,

Duration: Jan 2024 to Mar 2026

TRAININGS & EVENTS

Trainings | Webinars | Events - Organised/presented

Transformative ESG (Environmental, Social, and Governance) training program

**Hosur
26th & 27th June 2025**

Collaboration with Sustain World Pvt. Ltd. & EHS360

Water Circularity & Water Neutrality through Nature-based Solutions

**Virtual
22nd February 2026**

Collaboration with Water Offsets

Mangrove restoration on landfill site-The Adyar Eco Park success story presented in Health Safety & Environment World Expo2026

**Mumbai
3rd February 2026**

Organised by ChemTech Foundation

UN Global Compact Network India

**Bangalore
21st March 2025**

Bangalore International Airport

India's Underutilized Green Asset

**Virtual
26th April 2026**

India Vetiver Foundation



AWARDS & ACCOLADES

Received Adani Green Talks Social Impact Awards 2025 – SDG 15 – Life on Land Protector

Dr. Murali Janakaraj was presented the Sally Walker Endowment Award by Chennai Snake Park Trust on 21st June 2025 for his contribution towards nature & wildlife education work

Recognised for implementation & promotion of Vettiver in bund formation & stabilization by Dr. N. Kalaiselvi, Dept. of Scientific & Industrial Research, Govt in our restoration projects

Annual participant of UN Global Compact Network (India) for the period October 2024 to March 2025

BUILDING EQUITABLE AND
SUSTAINABLE SOLUTIONS FOR SOCIAL
AND ENVIRONMENTAL IMPACT

green
talks
Ideas that Impact



Life on Land Protector Award

Innovotek

MEDIA & OUTREACH

- Publication of riverine restoration along Adyar river under the title “**Mangrove Restoration in Adyar Estuary, Chennai: Challenges, Achievements & Lessons Learned**” was published in the **Chemical engineering World (CEW) Magazine**, March 2026 Edition.
- Dr. Murali had authored an article titled “**Uyir Moochu**” in The Hindu – Tamil Thisai on June 01, 2024.
- Dr. Murali & Dr. Ilangoan had authored an article titled பசுமை கார்பன் வரவுத் திட்டம்: இந்தியாவின் திசைவழி என்ன?" (Green Carbon Credit Scheme: What is India's direction?) which was published on Tamil Hindu (The Hindu Tamil Thisai) on August 03, 2023.
- Dr. Murali & Dr. Ilangoan had authored an article on “**Why Tree Plantations Scheme Fail**” published in Tamil Hindu (The Hindu Tamil Thisai) on July 29, 2023.



innovotek
Restoring Ecosystems. Building Climate Resilience.

CASE STUDY

Mangrove Restoration in Adyar Estuary, Chennai: Challenges, Achievements & Lessons Learned

The mangrove restoration in Adyar Estuary, Chennai, is one of the first attempts in the country to restore mangroves and their associated in ecosystems. Initiated as part of the socio-recreational development between 2007-2021 in the Adyar estuary as Phase I, II, and III, covering more than 200 acres, the restoration program aimed to rehabilitate native mangrove and mangrove-associated species, focusing on native species and mangrove species common to the Tamil Nadu coast. Dr. Ilangoan Kumarasingam, Director, Research & Restoration, Innovotek Pvt Ltd, explains in detail the success story of this green project.

Challenges

The mangrove restoration project in Adyar Estuary, Chennai, faced several challenges. The project area was a dry, open space with no mangroves. The restoration program aimed to rehabilitate native mangrove and mangrove-associated species, focusing on native species and mangrove species common to the Tamil Nadu coast. Dr. Ilangoan Kumarasingam, Director, Research & Restoration, Innovotek Pvt Ltd, explains in detail the success story of this green project.

Lessons Learned

The project area was a dry, open space with no mangroves. The restoration program aimed to rehabilitate native mangrove and mangrove-associated species, focusing on native species and mangrove species common to the Tamil Nadu coast. Dr. Ilangoan Kumarasingam, Director, Research & Restoration, Innovotek Pvt Ltd, explains in detail the success story of this green project.

The Restoration Journey

The mangrove restoration project in Adyar Estuary, Chennai, was initiated in 2007 by Tamil Nadu Urban Development Corporation (TNUDC) and the Government of Tamil Nadu. The restoration program aimed to rehabilitate native mangrove and mangrove-associated species, focusing on native species and mangrove species common to the Tamil Nadu coast. Dr. Ilangoan Kumarasingam, Director, Research & Restoration, Innovotek Pvt Ltd, explains in detail the success story of this green project.

5 Post graduate interns

3 leading institutions

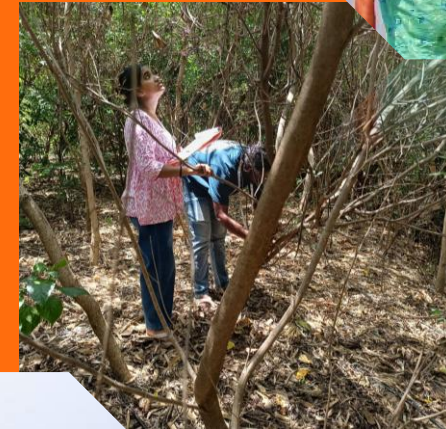
- Anna University, Chennai
- SRM University, Andhra Pradesh
- Bishop Heber College, Trichy

Focused on bridging Climate skill gap, Industry required Nature-based solutions, Operational readiness

Crafting future ready work force with mindful environmental values

INTERNSHIP

2025 – Summer internship

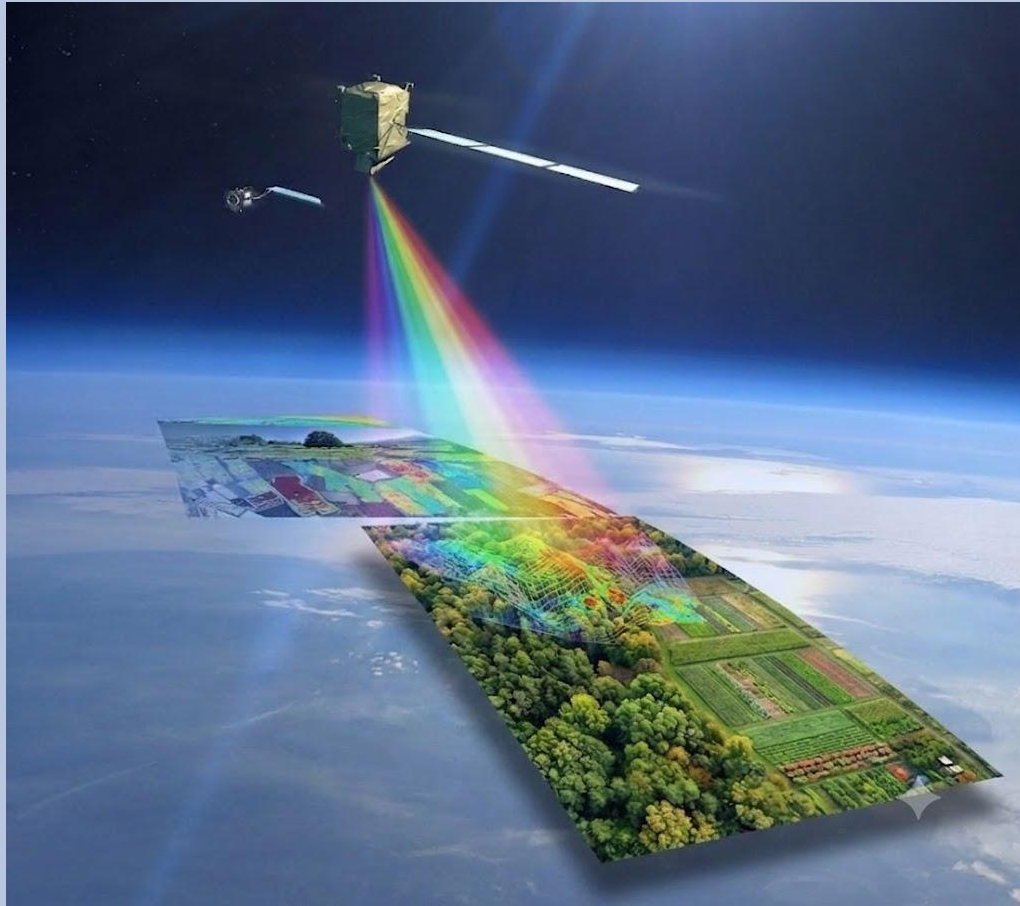


Research Publications

1. **Anbarashan, M., P. Sridhar, K. Ilangovan & M. P. Kumar.** 2026. *First record of the Redback Spider from Ennore Creek, Tamil Nadu, India.* Bugs R All #301, In: Zoo's Print 41(4): 33–35.
2. **Sridhar, P., Anbarashan, M., Dhatchanamoorhty, N. et al.** 2026. *Mimosa microphylla Dryand. (Fabaceae): A New Record for the Indian Subcontinent from the Coromandel Coast, India.* Natl. Acad. Sci. Lett. <https://doi.org/10.1007/s40009-026-02104-y>
3. **Anbarashan, M., Balachandran, N., Uma Maheswari, P.U. and Ilavarasy, D.** 2024. *Biomass, carbon stock and carbon dioxide sequestration by trees outside forests: A case study from Puducherry, India.* Indian Journal of Forestry, 47(1), pp.1-11.



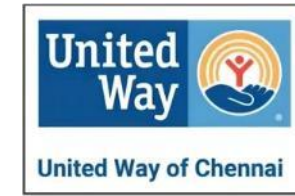
Patents



1. Dual Polarimetric Radar Vegetation Index at C Band to Estimate Vegetation Biomass using Sentinel-1 SAR Data over Agricultural Practices – Application No. 202541053270 A, Patent Publication India, 02nd June 2025
2. Quantification of Clay and Sand Fractions from Synthetic Aperture Radar Data - Application No. 202541053269 A, Patent Publication India, 02nd June 2025
3. Dual Polarimetric Sentinel-1 SAR Data for Land Use and Land Cover Estimation – Application No. 202541053271 A, Patent Publication India, 02nd June 2025
4. Dual Polarimetric SAR Based Crop Moisture Stress Index for Agricultural Crops – Application No. 202541053363 A, Patent Publication India, 02nd June 2025

List of Reports Prepared & Submitted by Team Innovotek

- Biodiversity inventory of Ennore creek – 4 reports
- Monthly monitoring report for eco-restoration of Ennore Creek – 24 reports
- Quality assessment of the plantation activities of Ennore eco-restoration – 2 reports, Period – 2023-2025
- A detailed biodiversity report of 28 lakes and 20 parks in Hosur as part of DPR for integrated storm water drain and rejuvenation of water bodies and sponge park concept, 2024-2025
- Integrated Blue economy & coastal resilience Vision Master Plan for the entire shore in Nagapattinam District and Detailed Project report (DPR) for development of two beaches in Nagapattinam District, Volume 5, Environmental & Social Impact assessment report for, Neithal Nagar and Prathabaramapuram beach Nagapattinam (February 2026)



- Detailed biodiversity assessment of nineteen lakes in the Palar River basin, November 2025
- Detailed biodiversity assessment of Kosasthalaiyar River (2024)
- Detailed Project report for Green Belt Development Plan for CPCL at Amullaivoyal, Chennai (2025)
- Topographic and Percolation testing in selected sites for creating rain gardens in Chennai (March 2026)
- Topographic survey, percolation testing, drainage area calculations, community engagement, and site marking of selected sites for creating rain gardens in Chennai (February 2025)
- Impact Evaluation Study Report of the Project “Restoration of Degraded Forest Landscape in Tamil Nadu (Phase I)” implemented in Thiruvallur District (2025)
- Restoration and Rejuvenation of Nallathanni Kulam (Freshwater Pond) at Agaramthen Village, Kancheepuram District in Tamil Nadu – Work Completion Report (March 2025)



Our Services

- Environmental Assessment & Regulatory Compliance
- Environmental Modelling & Water Resource Studies
- Feasibility Studies & DPR Preparation
- Landscape Restoration & Ecological Greening
- Plantation, Nursery & Green Belt Development
- Climate Action, Capacity Building & Stakeholder Engagement

Let's Connect

📍 Adyar, Chennai – 600020

✉ Email: contact@innovotek.in

🌐 Website: www.innovotek.in

Follow us on

 LinkedIn | Facebook | Twitter | Instagram

