

CSD Annual Publication

2024

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CSD's Profile & Milestones

Vision

*"To enhance the **quality of life** by catalyzing the role of citizens, market forces and governance to invest in **Sustainable development**"*

ABOUT CSD

Centre for Sustainable Development

is a non-profit organization established in the year 2003 headed by **Dr. A. Ravindra**, Former Chief Secretary of Karnataka as Chairman and is governed by a board of highly distinguished personalities. CSD has successfully gained credit for rendering qualitative service both in the field of sustainable development, environment protection and skill development through a range of activities from IEC to impact study.



FOUNDING MEMBERS

Along with Name and Occupation (at the time of incorporation) Designation

Dr. Ravindra A

IAS (Retd) Former Chief Secretary, Karnataka
Chairman

Mr. Baljee C.K

M.D, Baljee Hotels
Member

Mr. Harish H.V

Director- A.F. Fergusson & Co.,
Member

Mr. Parthasarathy

M.A Environmentalist/ Corporate leader
Member

Mr. Prabhu P.P

IAS (Retd) Ex. Commerce Secretary, Govt. of India
Member

Mr M.K. Ramachandra

Industrialist
Member

The CSD team condoles the demise of three of its founder members, Mr. P. P. Prabhu, Mr. M. A. Parthasarathy Mr. Attavar Manmohan and Mr. M.K Ramachandra who are remembered for their yeomen contributions to CSD.

CSD BOARD



Dr. A Ravindra

Chairman



Prof H.P. Kincha

Member



Sri. H. V. Harish

Member



Mrs Meena Raghunathan

Member



Dr. Meenakshisundaram

Member



Dr Srinivas Ravindra

Member



Dr J Gururaja Rao

Member



Dr. Chaya Degaonkar

Member



Prof M.K Ramesh

Member

CORE ACTIVITIES

1. Research

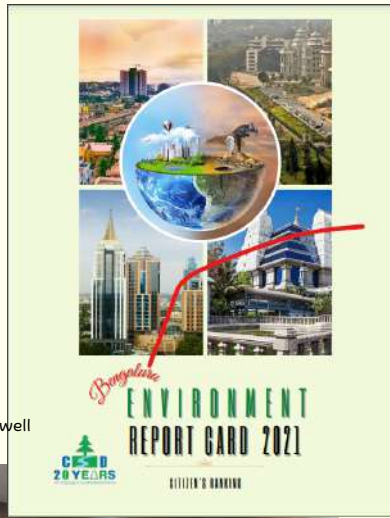
Natural Resource Management - Energy, Waste, and Water Climate Change and Cleaner Production

2. Skill development

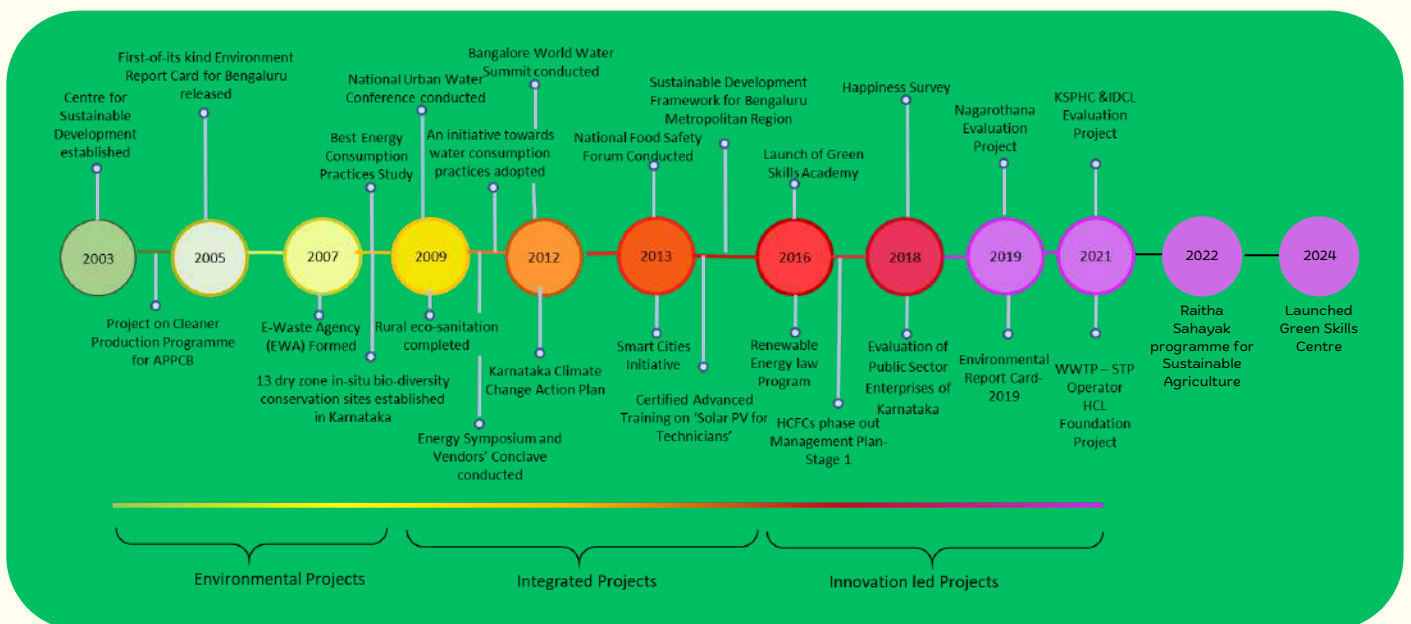
Training and Capacity Building



RWH Structure- Water collected in an open well



Environment Report Cards



CORE ACTIVITIES

3. Project Management

Environmental Management and Environmental Governance
Pro Sustainable Urban Development



DTS and toilets built in Ancharahalli



Preparation of Environmental Impact Assessment and Environment Management Plan in Chitradurga Schist Belt, Karnataka

4. Events

Promotional Activities and Outreach Programs

Green Job Fair '22



Hon'ble Minister and Delegates at India's Sustainability @ 75

5. Citizen Engagement

Waste Management workshop for Tech employees



Campaigns and volunteering

Observing International Biodiversity Day with school children



Chairman's message



CSD has been making tremendous efforts to promote the concept of 'sustainability' during the last two decades, culminating in the Sustainability Leadership Summit in 2023. This will be an annual event in future. For the summit in 2024, we have chosen the theme "Climate Emergency" in view of the dangers climate change is posing for the future of mankind.

As a part of sustainable development programs, we are focusing on 'Green Growth' and towards this end, we have launched the 'Green Skill Academy'. Training and capacity building in green skills will henceforth be a key feature of CSD; in particular, skill development at the grass root level will receive prominence.

I would like to take this opportunity to appreciate the initiative and hard work of the Executive Director and all the other staff responsible for the continuing progress of CSD.

Executive Director's message

As environmental issues gain importance like never before, solutions have become equally elusive. While global agencies are calling for a 'climate emergency', a section of antagonists, say, it's a 'hoax' or a 'scam'. Sustainability, is now a part of the Board room strategy of corporates, but few are willing to report transparently what they have achieved. ESG is the most recent buzz word, which aimed to enhance shareholder value and yield better dividends. But, companies are realising that it is easier said than done. Governments across the world are caught up in geo-political conflicts, and the recent wars have only added to more environmental destruction, much to the chagrin of the optimistic climatologists who feel that there is still a scope to achieve the 1.5 degree target. So where are we headed in our endeavour to save the planet?

In the last 20 plus years, CSD has through its experience, witnessed a cross section of environmental issues from industrial pollution to climate change and green skills, in the 200 odd projects that it has worked on. An interesting observation is that back then, environmental issues were viewed holistically, while now it's more fragmented. Undoubtedly, this could give a deeper understanding of each sector and higher technological advancements; the flip side is that we have lost sight of the larger goal of environmental protection.

Climate change and sustainable development should not be addressed in two separate conferences of parties. Water, air, soil and land are all part of the same ecosystem. Renewable energy and natural resources are intricately linked. The Supreme Court of India in 1986, asked the government to formulate the Environment Protection Act with a view to bring all environmental issues under one umbrella. Today, there isn't any comprehensive environmental plan for a city or a state that can define the goals of environmental protection with an integrated approach to implementing solutions. Most Environment departments in states are grossly understaffed and meagerly funded, showing the little importance given to the subject in our country.

CSD, in the coming years plans to work towards building integrated solutions to environmental problems through comprehensive city and state plans with clear outcomes. We believe that such an approach will reflect sustainable development in a more realistic way rather than just building a compendium of isolated case studies.

Another year has passed, and CSD is proud to present its work yet again. Kudos to the team and the Board for keeping the flag flying high.



-Dr. Srinivas R

Executive Director
Centre for Sustainable Development

Achievements and Accomplishments



Achievements and Accomplishments



CSD has received the 51st year SKOCH Award for Best initiatives in Skill Development.

Award was received by Dr. Srinivas, Executive Director, CSD at the Constitution Club, New Delhi.



Green Skilling

Skill development

Green Skills Academy (GSA) was established in the year 2017, in affiliation with National Skills Development Corporation (NSDC) and Skill Council for Green Jobs under the Ministry of Skill Development, Government of India as well as Kaushalkar.

It is a capacity building initiative by Centre for Sustainable Development, proposed to be set up with the intention of imparting skills required for developing India's green economy. The academy aims to provide knowledge and training on select green technologies that will both enable a new workforce and upgrade skills of existing workforce. Since its inception, GSA has achieved to

- Train 7000+ individuals within Bengaluru with NSDC certification
- Build a network of passionate-about-sustainability individuals
- Develop effective and industry specific curricula for courses in alignment with the NSQF framework.
- Launch and run 25+ Flagship courses of the green sector, to name a few, Sewage Treatment Plant Technician/Operator, Solar Rooftop PV grid engineer, Sustainable Waste Management, Green Buildings- Design and Construction, Sustainable Agriculture, etc.

- CSR
- Awareness Programmes



GREEN SKILLSTM
ACADEMY

- Green Skills Academy

Certification Partners



Trainers

- Dr. Ananth S Kodvasal
- Mr Devaiah
- Mr Ramanand S G
- Mr. Ravi Kumar Gurumurti
- Ar. Rajesh Malik
- Mr. Ramprasad
- Mr. Gurunath Govind
- Dr. R Srinivas
- Dr. Shanti
- Ms. Savitha Hiremath
- Dr. Sowmya

CSR Training Programmes

CSD has been working closely with some of the most reputable corporate partners such as HCL Foundation and Dr. Laboratories under their CSR programmes mainly focusing on green skilling and enhanced livelihoods.



Launch of new green skilling programmes and programme on Waste Management

Launch of Green Skills Programme exclusively for Women on July 21st, 2023, at Yuvapatha. The launch was graced by Mr. Sudarshan, General Manager, KSDC and Mr. Naveen Ram, Operations Director, ING HCL Tech and HCL Foundation Team as the special guest.

Waste Management and Solar Energy curricula was developed followed by the training of batch 1 - waste management.



Training programme on Solar Energy

The Batch 2 of the programme on Solar Energy was conducted in September 2023.

The beneficiaries were able to visit eminent organizations such as KGTTI for their site-visits.





Wastewater Treatment Programme in Hyderabad

CSD had trained, certified and placed individuals in the field, in Hyderabad, Telangana, in association with Dr. Reddy's Laboratories

The valedictory ceremony was conducted post completion of the course and was attended by Shri Kumar Randhir Singh, Head of CSR at Dr. Reddy's Laboratories



GSA Programmes

In Support of GIZ -IGVET an Orientation programme for Govt High School Konappana Agrahara was conducted sensitizing school students on importance of green skill development and green jobs.



Wastewater Treatment Programme at ELCIA



conducted a workshop on Wastewater Treatment Plant at ELCIA (Electronics City Industries Association) as a part of Upskill program for an existing STP Operator, Supervisor & Manager.

As part of the workshop the employees are trained on various essential topics such as health and safety measures, troubleshooting and maintenance, etc for efficient functioning of the treatment plant



Training programme on Green Buildings – Design and construction in Tamil Nadu

A training programme on Green Buildings – Design and construction for Aadiyamaan College of Engineering, Hosur was conducted in August of 2023 for 45 architecture students.

The two-day certification programme helped students gain hands-on experience in the technologies and softwares used in the industry



A 30-day STP Operator training programme in collaboration with Additional Skill Acquisition Programme (ASAP) - Kerala

CSD in collaboration with ASAP, Kerala a Government of Kerala initiative, conducted an extensive training programme on Wastewater treatment training 30 graduates in the topic equipping them with skills to acquire jobs in the industry.

This programme saw enthusiastic participation from the trainees and included site-visits to treatment plants, theory sessions followed by assessment and certification of the trainees. The programme begun in the month of March, 2023.



Interventions into the slums of Bangalore

A story of D.J Halli ~

Transforming D.J. Halli: The Women SHG Leading a Clean Revolution

D.J. Halli, one of the largest slums in Bangalore and notoriously known for heaps of garbage was recently tapped into by the Skill Development and Livelihood Programme. The narrow lanes were often clogged with waste, making life difficult for the residents. Disease outbreaks were frequent, and children played in unsanitary conditions. For years, the community felt trapped, thinking that their waste problem was too big to solve—until a group of women were brought together on their usual day for a talk at the nearby community space which turned them into determined women deciding to take matters into their own hands over the course of ten days at the beginning to now seven months into a strong group with more and more women joining to tackle the waste management issue.

A few of these 60 trained women, many of whom had grown up in D.J. Halli, formed a Self-Help Group (SHG) with a vision for a cleaner, healthier environment, they set out on a mission to tackle waste management. With the support from local NGOs and other funding sources, CSD armed them with the knowledge and skills to do so.

Their first step was to raise awareness. Going door-to-door, the women spoke with families about the importance of segregating wet and dry waste. Many residents were unfamiliar with these practices, but the SHG patiently explained how proper waste segregation could improve sanitation and reduce the risk of diseases like dengue, which plagued the slum. Slowly the message began to take hold.

The women were provided with two bins— one for wet waste and one for hazardous/rejected waste to start the segregation at their household level. The women were also provided with menstrual cups post the session on menstrual hygiene and were made aware of the reduction of waste and saving of money from the shift to cups. Initially, there were challenges. Some households resisted the new system, but the women did not give up. They held community meetings, where they shared stories of how waste management could lead to better health and even create income opportunities. The women, who had once been ordinary residents, were now seen as change makers. Their initiative not only cleaned up D.J. Halli but also empowered the entire community, showing them that even in the most challenging circumstances, change is possible.

Today, D.J. Halli stands as a shining example of how self-help groups can bring about sustainable transformation. The efforts of these women not only improved waste management but also fostered a sense of pride and ownership in the community. Initiatives on small in-house composting units where wet waste is turned into organic fertilizer, selling of compost to nearby gardeners/households, businesses on making cleaning solutions, bio-enzymes, being set up have created new income streams empowering these women and their family members.

Citizen engagements and events

CSD understands the importance of engaging communities and individuals by creating awareness on issues that directly and indirectly impact them.

World Environment Day on June 5th 2023 at CSD's office

Activities on greening the office space along with sustainable and eco-friendly practices were carried out on the occasion of World Environment Day.



Hands-on activities for corporate employees

Various awareness programmes, workshops on waste management, terrace gardening, climate resilience etc were conducted for employees of different backgrounds helping them apply sustainable practices in their day-to-day lives contributing effectively towards the transition.



CSD 20th Anniversary Event

India's Sustainability @ 75

On the occasion of celebration of 75th India's Independence (Amrit Mahotsav) and completion of 20th year of Centre for Sustainable Development (CSD), Bengaluru

- CSD organized a grand 2-day event consisting of many activities and events which brought together some of the most influential, bright and passionate personalities, youth and the like.

On 3rd November 2023 at BMS College of Law, Bengaluru

- The Finals of the National Youth Climate Conclave (mock Conference of Parties) saw young Climate Saviours, the winners of the regional Youth Climate Conclave rounds from cities Hyderabad, Pune, Bhubaneswar and Bengaluru
- The Sustainability Showcase hosted some of the fastest growing start-ups, companies and small businesses working in the fields of waste management, Carbon emission control, energy efficiency, circular economies and the like.

On 4th November 2023 at The Capitol Hotel, Bengaluru

- The city had some eminent personalities from all over the country speak on pressing issues like the Climate Change and Need for accelerating Sustainable Development Goals' progress at the Sustainability Leadership Summit, 2023
- The Bengaluru Declaration on Accelerating SDG progress was released and circulated amongst the state and central ministries.

Youth Climate Conclave 2023

Hyderabad

Hyderabad being a hub of growth, faster urban expansion, industrialization (Information Technology and Bio-technology), infrastructure development and expansion of service sectors and educational institutions, it was chosen as one of the cities.

Universities and Colleges

- IMT
- HRD Degree and PG College
- Sri Konda Laxman Telangana State Horticultural University
- St. Mary's College



Pune

With climate externalities creating vulnerability in the city and the state due to its location and geophysical conditions, Pune was considered for debating on climate issues.

Universities and Colleges

- COEP Technological University
- Symbiosis
- Savitribai Phule Pune University
- Fergusson College
- PVPCoA
- Marathwada Mitra Mandal's College of Architecture



Bhubaneswar

Odisha has taken early initiative to formulate Climate Change Action Plan for the State including 11 sectors in a holistic manner. The city's exposure to climate abnormalities like cyclones, floods, etc throughout the year called for climate discussions and involving youth.

Universities and Colleges

- Utkal University,
- KIIT (Rural Management),
- BJB Autonomous,
- SOA
- RD Women's University,
- PN College



Bangalore

Bengaluru being the hotspot for FDIs we see rapid urbanisation and expansion which leads to ever growing environmental problems.

Universities and Colleges

- Christ University
- SSMRV college
- Adhiyamaan College of Engineering
- BMS college of Law



Events on 3rd November 2023

Sustainability Showcase

The Sustainability Showcase had participant businesses and aspiring entrepreneurs in and around Bengaluru showcase their work and ideas on 3rd November 2023.

The event saw 12+ stalls of selected companies and organisations, a jury panel of eminent members to assess presentations.

The participants were awarded on the following day at the Sustainability Leadership Summit at the Capitol Hotel, as follows

- Best Impact - Prakruthi Eco Club, SSMRV Degree College, Jayanagar, Bengaluru
- Best Service - Solid Waste Management Round Table (SWMRT), Bengaluru
- Best Sustainable Product - Endlessly Green, Bengaluru
- Best Exhibit - Wasted 360 Solutions, Bengaluru



Finale of the National Youth Climate Conclave 2023



Winners of the preliminary rounds conducted regionally in the cities Hyderabad, Pune, Bhubaneswar and Bengaluru participated in the Finals of the National Youth Climate Conclave on 4th November as part of CSD's 20th Anniversary events at the Capitol Hotel, Bengaluru.

Winning teams of the finals -

- Winners - Team Australia from BJB Autonomous College, Bhubaneswar, Odisha
- First Runner up - Team Brazil from SSMRV college, Bengaluru, Karnataka
- Second Runner up - Teams India and Bangladesh from Savitribai Phule Pune University, Pune, Maharashtra and Institute of Management Technology, Hyderabad, Telangana, respectively.



Summit event on 4th November 2023

The Sustainability Leadership Summit

The Sustainability Leadership, 2023 organized by CSD in Bengaluru brought together incredible minds, experienced professionals to impart their knowledge and emphasize the need for increased efforts to achieve Sustainability in all sectors.

The Summit saw eminent personalities, to name a few, Shri. Eshwara Khandre, Hon'ble Minister for Forests & Environment, Karnataka; Shri. Javed Akthar, IAS, Additional Chief Secretary Dept. of Environment & Forests, Karnataka; Dr. Shalini Rajneesh, IAS, Additional Chief Secretary and Development Commissioner, Govt. of Karnataka; Mr. Lehar Singh Siroya Member of Rajya Sabha from Karnataka; Shri. M.R. Sreenivas Murthy, Chief Executive, Gokula Foundation (Medical); Smt. Uma Mahadevan IAS, Additional Chief Secretary, Rural Development and Panchayat Raj and Skill Development.

Our Speakers included Dr. Abinash Dash, Director, Development, Monitoring and Evaluation Office, NITI Aayog, Govt. of India; Mr. Anirbhan Ghosh, Head, Centre for Sustainability, Mahindra University; Dr. S. Satapathy, Former Director, Climate Change, Ministry of Environment, Govt. of India; Dr. Achalendra Reddy, Chairman, National Biodiversity Authority, Chennai; Dr. Dola Bhattacharjee, Scientist, Regional Office, Ministry of Environment; Dr. Ramanjaneyulu, Centre for Sustainable Agriculture, Hyderabad; Mr. K Krishan, Industrialist and Former Chairman, Skill Council for Green jobs, New Delhi; Ms. Sangeeta Patra, Vice President, Skill Council for Green Jobs, New Delhi; Mr. Naveen G.V, Managing Director, Benchmark Gensuite; Dr. Yale Lingaraju, National Director, River rejuvenation projects, Art of Living, Bengaluru.

The Summit aimed to spark conversations and actions to achieve the targets set in Sustainable Development, especially Climate goals. The topics broadly covered SDGs' Progress and Challenges, Climate Change as a challenge in SDGs, Acceleration of SDG actions and the road ahead for SDGs.





Projects



Evaluation of works carried out by KKRDB

Background: The Kalyana Karnataka Region Development Board (KKRDB) was established in 2013 to accelerate the development of six backward districts in Karnataka: Kalaburagi, Bidar, Raichur, Koppal, Yadgir, and Ballari. It aims to bridge the regional development gap and bring these districts at par with the more developed regions of the state. KKRDB implements various development projects through departments like PWD, Irrigation, Health, and KRIDL, covering social and non-social sectors. Their key objectives for this project included accelerating the holistic development of the most backward region of the state represented by 41 Assembly constituencies and to achieve a balanced regional development on par with the developed districts of the state.

The KKRDB developmental works considers the following 5 sectors broadly for improvement.

1. Agriculture
2. Industry
3. Economic infrastructure
4. Social infrastructure
5. Financial and technical infrastructure

The objectives for this evaluation project were as follows:

- To assess the number of works carried out by KKRDB across various sectors such as health, education, agriculture, irrigation, roads and bridges, water supply, sanitation etc., in 2021–22.
- To examine the present status of work, completed and in progress.
- To examine the need and adequacy of allocation across various sectors and beneficiary groups.
- To check the quality of works.
- To examine the immediate impact of the works undertaken during 2021–22 in terms of benefit to the people and region.
- To provide suggestions for better allocation of funds in future action plans as well.

The evaluation carried out by CSD used a mixed-methods approach, combining quantitative and qualitative techniques. This included literature reviews, field visits, interviews, focus group discussions, and data analysis. Quantitative methods involved statistical analysis, while qualitative methods focused on understanding the context, experiences, and perceptions of stakeholders. The evaluation assessed the effectiveness of KKRDB's projects in terms of their impact on beneficiaries, their alignment with development goals, and the efficiency of their implementation.



Table 2: Theory of change

Input	Sub-type	Output	Outcome
<ul style="list-style-type: none"> • Project management, supervision, quality control • Organizational Management • Technology • Human Resource 	Education	<ul style="list-style-type: none"> • Constructed class rooms and toilets • Provided computers and other accessories • Established library and furniture's • Constructed hostel/guest houses • Training sessions 	<ul style="list-style-type: none"> • Improved enrolment/admission especially by girls/women • Students' digital knowledge developed • Many students made attempt to clear competitive exams • Reduced students who are travelling far distances • Increase self-employment
	Health	<ul style="list-style-type: none"> • ICU infrastructure established • New beds to hospital • Staff quarters constructed • Oxygen cylinders are provided 	<ul style="list-style-type: none"> • Save patients life • Improvement in health treatment • Staff are accessible timely • Patients feel confidence on hospital during emergency periods
	Integration	<ul style="list-style-type: none"> • Tanks are reconnected • Check dams are 	<ul style="list-style-type: none"> • Water level improved in tanks

Glimpses of

March' 2022 | 2023

Highlights

- Swachh Survekshan 2023 training programme for 730 Pourakarmikas of BBMP across 8 Zones
- Training Programmes - Sustainable Agriculture
- Entrepreneurship programmes - Sustainable Agri-business, Waste Management, Solar
- Environment Report Card 2021
- Covid relief activities

CSR Training Programmes

Training programmes were successfully conducted in various batches. These programmes also saw various individuals setting up their businesses and



STP Operator training programmes in 2021

Over 60 individuals were trained, and the valedictory ceremony was conducted where the participants were invited. Some of them have benefitted by getting job and some of them have expanded their Business as an Entrepreneur.

The experts present at the ceremony, Dr Ananth and Mr Jagadish have shared the importance and necessity of STP training Programme



Webinar on Understanding Sustainability and Its Application in Our Lives

Dr. Srinivas, Executive Director of CSD, presented on the topic and interacted with employees of HCL Technologies

Discussions on sustainability, the green growth model and sustainable practices were carried out

Power One
HCL FOUNDATION

Dear All,
Greetings from HCL Foundation!

We are pleased to invite you for the fourth session in the Power of One INSPIRE series. INSPIRE series is a platform to facilitate conversations and exchange of ideas on important topics affecting us.

This time, join us to discuss and understand sustainability, the 'green growth model' and how we can contribute towards saving our planet.

Understanding Sustainability and Its Application in Our Lives

Friday August 27, 2021

3:30 PM to 4:30 PM

Guest Speaker
Dr. R. Srinivas
Executive Director

Dr. R Srinivas is an accomplished environmentalist. He has completed his doctoral studies in Environmental Law from the National Law School of India (Bangalore) and has undergone training in Environmental Economics at the Indian Institute of Management, Calcutta (IIM-C). He has worked as a Senior Environmental Specialist (Consultant) with the World Bank and in the Ozone Cell, Ministry of Environment & Forests, Government of India. He is known for his contribution in the implementation of the Montreal Protocol and was also selected for the prestigious, Temasek Foundation Water Leadership Program at Singapore in 2012.

Join us & get inspired!
For more details or support, please contact:

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Event – CSD Partner Meet 2021

Centre for Sustainable Development (CSD) held a meeting of about 50 people which included the biggest, the brightest and the best brains of Karnataka; at the Royal Orchid Central on Dickenson Road, Bangalore on 17th December 2021

CSD Partner Meet 2021 was certainly one of those events where thought-provoking discussions on various topics took place.

The 3 Capsule Discussion consisted of 3 Moderators and 8 Panelists. Two of the 3 Moderators were our very own CSD Chairman – Dr A Ravindra, Former Chief Secretary of Karnataka and the Executive Director of CSD – Dr. R Srinivas along with Dr. Sunil Nautiyal, Prof. & Head of CEENR, ISEC.

The names of the Panelists are as follows:

- Mr. Amir Bazaz, Sr. Lead- Practice, IIHS
- Ms. Rejini Simpson, Regional Coordinator, CEE, EMPRI (TBC)
- Dr. Ashwin Mahesh- Urban Specialist and Founder Map Unity
- Dr. Neha Sami, Associate Dean, School of Environment and Sustainability
- Mr. Ramesh, Former Chief Environmental Officer, KSPCB
- Mr. Sathya Sankaran, Co-Founder, Urban Morph
- Ar. Vasudev K. Ecumene Habitat Solution

With every discussion and session, the panelists helped audience to thinking on the lines of 'sustainable living'. The panelists also had given facts and figures on the matter.

The CSD Activity Report 2019-21 was also released by the Chairman – Dr. A Ravindra, Dr. R Srinivas along with the Board Members.

Much appreciation was received for conducting the event.



GSA Training Programmes

Training programmes on Sustainable and Smart Agriculture in the districts Vijayapura, Gulbarga, Bidar and Raichur of Karnataka

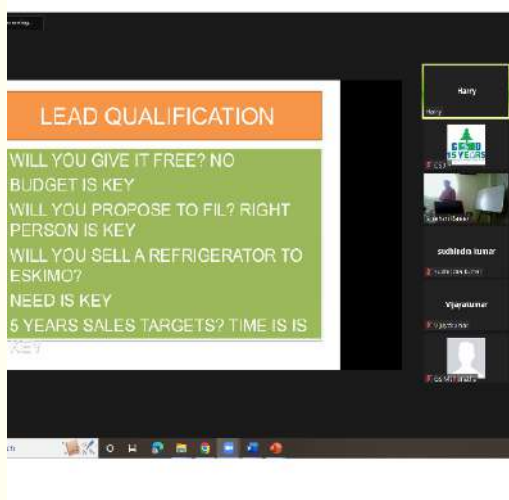
Groups of farmers in these districts were trained and certified on Sustainable and Smart Agriculture - Raitha Sahayak Trainings

The objective of these programmes in rural Karnataka is to sensitize farmers and agriculture practitioners on smart and safe choices of produce trade benefitting many such as producers, buyers and the environment.



Green Entrepreneurship programmes for aspiring entrepreneurs

This programme had seen aspiring entrepreneurs from various backgrounds who have been trained and certified in Green Entrepreneurship - Waste Management; Solar Energy; Sustainable Agriculture. This comprehensive programme included sessions by industry experts, discussions on successful case-studies and various other beneficial ones that helped trainees draw their business plans



Solid Waste Management – Swachh Survekshan 2023 training programme for the Pourakarmikas of BBMP across 8 Zones.

Groups of pourakarmikas across 8 zones of the city were trained and certified on Solid Waste Management.

The objective of these programmes is to sensitize and train waste pickers on various technical and non-technical aspects of the subject such as health and safety, segregation, environmental health impact, etc.

This substantial drive was successfully conducted training and certifying 780 pourakarmikas.



Citizen Engagements

Orientation programme for St Joseph's MSc in sustainable Development students

This programme had seen aspiring students from the professional course of Sustainable Development. About 20 students visited the CSD's office and were able to get insights and resources to navigate the field of Sustainability.



A Mirage of Green: The Quest for Climate Justice Amidst a Labyrinth of Commitments

Prof. (Dr.) T.R. Subramanya- Dean, CMR University, School of Legal Studies, Bangalore
 Mariya Biju Thattil- Student, 5 th Year, B.B.A., LL.B (Hons.)

In the grand theatre of global environmental discourse, climate justice stands as both a noble aspiration and an elusive ideal. This dialogue reflects humanity's relentless yet fragmented pursuit of balance between developmental ambitions and ecological responsibility. Despite eloquent commitments, real progress is tangled in a web of bureaucratic inaction, competing interests, and entrenched inequalities. Though climate agreements have long promised action, their goals remain compromised, often fading into a haze of political complexity and unequal burden-sharing.

The journey began with the Earth Summit in Rio de Janeiro in 1992, which catalyzed global awareness and birthed frameworks like the Convention on Biological Diversity (CBD). This was soon followed by the 1997 Kyoto Protocol, a treaty aiming to bind industrialized nations to reduce greenhouse gas emissions. Here lies a central irony: while the developed world bears most responsibility for historical emissions, it is the developing world—often bearing the brunt of climate impacts—that is now asked to temper its own growth for global goals. This rift highlights the enduring inequity at the heart of climate policy.

As the 20th century ended, additional frameworks arose to address gaps. The Cartagena Protocol (2000) and Nagoya Protocol (2010) furthered the CBD's mission, establishing biosafety and benefit-sharing of genetic resources, but they were no remedy for the persistent fragmentation of global commitments. By 2023, voices like Sadhguru's urged nations to revitalize degraded lands, highlighting an enduring call for ecological harmony that speaks particularly to India's cultural ethos.

India, with its vast ecological and socioeconomic landscape, stands as both a paradox and a leader in climate justice. The country's strong pledges toward renewable energy reveal a fierce commitment to sustainability, positioning it as an ambitious global player. Yet, the irony is clear: India's growth depends on industries that strain its ecological health. Policies like a carbon tax and the National Solar Mission aim to curb fossil fuel reliance, but pollution and degradation continue to challenge sustainable development. Critics argue that despite bold initiatives, the nation's urban centers still choke on pollution, while rural areas suffer environmental degradation.

Even with frameworks like Kyoto and Nagoya, many commitments are partially fulfilled, presenting a vision of clean energy transition that is both a beacon and a mirage. For emerging economies, balancing growth with emissions goals is a daunting task, further complicated by financial burdens of solutions like carbon taxes. Meanwhile, developed nations often exploit carbon credits, sidestepping true emission reductions. This paradox underscores a troubling truth: global climate policy, while professing fairness, frequently overlooks the unique challenges of the global South.

As India intensifies its focus on sustainable water management, the climate justice narrative grows increasingly complex. Recent strides in water conservation and solar projects offer hope, but progress remains stifled by institutional inertia. True climate justice requires more than technical measures; it demands a reevaluation of global priorities and support for those bearing the heaviest burdens. Major democracies like India play a pivotal role, modeling resilience for developing nations. Yet, if global climate dialogue is to achieve its high ideals, it must confront deep-rooted inequities, rebalancing power and accountability. Climate justice, then, is both a precarious ambition and a frequently elusive pledge. As the world grapples with sustainability and social equity, the question persists: can true climate justice be realized, or will it remain a mere mirage of green? The answer lies not in rhetoric but in actions that genuinely bridge the gap between commitment and accountability, advancing a future where climate justice transcends ideals to become reality.

Note on Dr. Reddy's approach to the climate emergency

Climate change is one of the most pressing global challenges, impacting health, natural habitats, livelihoods, ecosystems, and weather patterns. We recognise the scale of the climate crisis, and the need for urgent action to combat climate change. The pharmaceutical sector has a considerable impact on the environment, and we believe the industry needs to take a leading role in reducing this impact.

While the growth in business results in higher resource consumption, we are consistently working to reduce the environmental footprint generated by our operations. Our vision is to achieve carbon-neutral growth because we believe that business must coexist with the environment.

Our environmental footprint

The majority of our Scope 1 (direct) emissions originate from boilers used in operations for producing steam, electricity, and wastewater treatment facilities. Our Scope 2 (indirect) emissions are from purchased electricity for running facilities and operations. Our Scope 3 (indirect) emissions include emissions from purchased goods and services, capital goods, processing of sold products and others. Industrial processes generate significant amounts of carbon emissions, SO₂ & NO_x emissions, as well as particulate matter that adversely affect local ecosystems, air quality, and habitats. We are committed to preventing and mitigating air pollution by increasing the efficiency of operations and reducing emissions. We adhere to emission norms and control emissions within statutory limits. We adhere to all relevant environmental laws, regulations, and guidelines in the markets where we operate.

Our environment-focused goals, performance, and strategy

We have set ambitious goals in carbon neutrality and transitioning to renewable power, while also addressing the emissions in our value chain.

Carbon Neutrality

We have committed to be carbon neutral in our operations (Scope 1 and 2 emissions) by 2030. In FY 2024, we achieved 48% carbon neutrality, reducing 47,969 MTCO₂e of direct emissions. We invested INR 248 million, adopting new environmental technologies across the value chain for continuous improvement in environmental parameters such as water, wastewater, waste, and emissions.

Our levers for decarbonization include working on our energy mix by generating and purchasing power through renewable sources, energy conservation, increasing our energy efficiency, and making an energy transition by shifting to low-carbon fuels as well as usage of biomass in place of fossil fuels, and eventually carbon offsets at later stages to neutralize our residual emissions.

For better resource efficiency, we have also been increasing the adoption of green factory buildings in India, with 7 of our sites certified as green buildings by the Indian Green Building Council (IGBC). Apart from this, we also adopt green chemistry principles to reduce pollution at source and minimize hazardous substances. We conduct lifecycle assessment (LCA) studies each year on select active pharmaceutical ingredient (API) products, measuring the mass intensity of API manufacturing to understand the associated environmental impact.

We consider biodiversity conservation as a crucial component of sustainability and remain committed to protecting and conserving biodiversity in our manufacturing locations. We do not operate in biodiversity-rich habitat areas with International Union for Conservation of Nature (IUCN) red list species or national conservation species, remaining mindful of projects that have a positive impact on biodiversity. At the World Economic Forum (WEF) - Sustainable Development Impact Meetings (SDIM) 2023, we announced a company pledge to conserve, restore and grow forests, contributing to 1t.org's restoration efforts. The integrated plantation initiative covering 2900 hectares, encompassing mangrove, agroforestry, and bund plantations, offers a comprehensive approach that benefits both nature and the climate. By nurturing biodiversity, capturing carbon, enhancing ecosystem resilience, and promoting economic stability, the project aligns with multiple ecological goals while also addressing economic needs and promoting community well-being.

This pledge will take place from 2023 to 2028, and the estimated carbon benefits of the initiative are expected to be 194,241 tonnes of CO₂ emissions. The initiative is based on long-term ongoing projects implemented through Dr. Reddy's Foundation, our non-profit implementing partner. More details are available here: <https://www.lt.org/pledges/rooting-resilience>.

Renewable Power

We have set a goal to transition to 100% renewable energy by 2030. In FY 2024, 56% of our power was through renewable sources, and we invested INR 183 million on renewable energy projects and technologies.

Our strategy to achieve 100% renewable power by 2030 includes maximising the capacity utilisation of renewable power supplies by developing new wind & solar hybrid projects through joint venture partners for long-term supply, and switching from fossil fuels to biomass in boilers and co-generation plants and securing long-term supplies through various measures. We are developing alternate biomass fuel sources like rice husk and sawdust briquette, ensuring strategic forward contracts with biomass fuel suppliers to address supply chain issues, and adapting to the latest green technologies. We will continue to invest in solar, hydel, and wind power projects and accelerate our journey of green transition by substantially increasing the share of renewable energy at all our facilities.

Value-chain Emissions

74% of our carbon footprint emerges out of the external value chain. Our goal is to reduce 12.5% of our indirect carbon emissions across our supply chain (Scope 3 emissions) by 2030. We reduced our Scope 3 emissions by 3% in FY 2024, with respect to FY 2021.

We are working on multiple levers including enhanced engagement with strategic suppliers, developing sustainable procurement strategy, and a preference for local suppliers and materials wherever feasible. As part of our efforts to reduce our Scope 3 carbon footprint, we are increasingly transitioning from air to sea transport, improving packaging to optimise shipments, and increasing renewable power as well as biofuels.

We engaged with high value spend suppliers to understand supplier specific performance related to emissions and water, and are expanding our coverage further. We have shifted our Scope 3 accounting model from overall spend based to supplier-specific spend based method, which has also contributed to a reduction in our Scope 3 emissions this year.

Water positivity

We remain committed to water stewardship and developing a sustainable water supply system for our operations, having taken a goal be water positive by 2025. This year, we continued to be a water positive company, after achieving our target in FY 2023. We reused/recycled 48% of water, reduced our fresh water consumption by 35,261 kilolitres, and conserved 95,344 kilolitres of water.

We require high-quality water for our production operations, relying on various sources of water including surface, ground, municipal, and harvested rainwater. We are optimising freshwater use and improving water efficiency across operations while de-risking groundwater through multiple projects such as increased use of surface water and desalination plants. To manage wastewater and eliminate the risk of groundwater contamination, we have set up wastewater recycling plants and zero liquid discharge plants and ensure the safe disposal of the waste left over after treatment. We also work to preserve water in communities and rejuvenated 3 ponds this year. We reached over 1700 farmers in 70 villages in Andhra Pradesh, enabling water savings of 18,50,000 kilolitres through sustainable agriculture practices and techniques.

Our credentials

In FY 2024, we retained an A- rating in CDP Climate Change 2023, and regained our A- rating in CDP Water Security. This puts us in the Leadership band, indicating we are implementing current best practices. We were also rated A and featured on the CDP Supplier Engagement Leaderboard 2023 for the third consecutive year, recognising our efforts to measure and reduce climate risk within the supply chain.

We were also named Asia-Pacific Climate Leader 2024 for the second year in a row by Financial Times (London) and Statista.

Exploring Inclusive Climate Action- Working with The people and Community

In 2015, the United Nations Member States laid out 17 Sustainable Development Goals (SDGs) to succeed the Millennium Development Goals as guiding principles for development from 2015-2030 through transformative change. These goals aim at ending poverty, protecting the planet and ensuring prosperity through equitable development and environmental sustainability and craft an equal, just and secure world- for people, planet and prosperity by 2030. SDG 13 focuses on the “urgent action” required to “combat climate change and its impacts”, highlighting the need for incorporating both climate change mitigation and adaptation. SDG 13 aims at (a) strengthening resilience and adaptive capacity to climate related hazards and natural disasters in all countries, (b) integrating climate change measures into national policies, strategies, and planning, and (c) improving education, raising awareness and human institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning. SDGs demand a participatory process for accomplishing the outcomes. Goal 13 acknowledges the role being played by the United Nations Framework Convention on Climate Change (UNFCCC) that calls for Global Action against climate change. Goal 17 directs at building partnerships at Global, national and local levels for achieving the agenda in an inclusive framework as SDGs are for the people, of the people and by the people.

The UNFCCC, Kyoto Protocol, and the Paris Agreement are supporting rising levels of national ambition. The Paris Agreement, adopted under the UNFCCC, with near universal participation, has led to policy development and target-setting at national and sub-national levels, in particular in relation to mitigation, as well as enhanced transparency of climate action and support. The recent IPCC report recognizes the interdependence of climate, ecosystems and biodiversity, and human societies; the value of diverse forms of knowledge; and the close linkages between climate change adaptation, mitigation, ecosystem health, human well-being and sustainable development. It also reflects on the increasing diversity of actors involved in climate action. (IPCC 2023).

Government is supposed to be a key actor in in planning and implementing Climate Action Plans and strategies. But, outcomes will definitely depend upon involvement and support from communities and people. In this context, NGOs form a link between the Government and the society. Their partnership is a key factor in implementing the inclusive Climate Action Plan. NGOs play a crucial role in raising awareness, implementing sustainable practices and advocating for policy changes to address the challenges posed by climate change. The NGO Sector thus ensures promoting climate adoption and mitigation interventions and resource management through information, education, and communication activities. The evidence below provides a glimpse of the NGO coverage of diverse fields in Climate Action.

NABARD launched a major education and communication campaign called Jal Jivan Hai or Water for Life, in partnership with the Centre for Environment Education. The campaign reached out to over a hundred thousand villages spread across 21 states of the country with the help of a specially trained cadre of youth called Krishi Jal Doots (KJD). Along with training, KJDs were provided with a kit containing educational resource materials to conduct a 'day in a village' campaign module.

Centre For Sustainable Development Begaluru works with a primary focus on designing and developing sustainable practices for development activities and keep the values of natural ecosystems and importance of their conservation through proper environmental education, planning and management. It works in close association with various Government agencies, Research institutions and civil society organizations for capacity building in Green Skills, Waste Management and promoting civic awareness through Climate Action Conclaves.

Gram Vikas has been a forerunner in facilitating sustainable rural development in Odisha. Their approach integrates water and sanitation, renewable energy, and habitat development, ensuring a comprehensive improvement in rural life quality. Gram Vikas's model is inclusive, ensuring every family in the community is part of the development process, thus promoting environmental sustainability alongside social equity.

Environmental Foundation of India (EFI) is dedicated to preserving and protecting the environment. With a strong focus on wildlife conservation, EFI actively engages in restoring and maintaining the balance of ecosystems across India. Their tireless efforts include cleaning lakes and water bodies, afforestation drives, and educating communities about environmental sustainability.

Thus, there is high potential and opportunity in harnessing ongoing civil society and private sector action to buttress government interventions around climate action. Such an approach will help widen the ambit of responsibility as well as build upon existing interventions such as Corporate Social Responsibility (CSR) activities by private companies around environmental protection. Participatory and Inclusive action is the sustainable solution for Climate Action.



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Sustainability leadership summit to release Bengaluru declaration on Saturday

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Synopsis

To commemorate its 20th anniversary, the Centre for Sustainable Development (CSD) will host a Sustainable Leadership Summit in Bengaluru. During this event, the 'Bengaluru Declaration on Acceleration of Sustainable Development Goals (SDG)' will be adopted. CSD Chairman, A. Ravindra, emphasized that the declaration would set the course for sustainable development involving government, industry, NGOs, and youth.

Representative Image

The [Centre for Sustainable Development](#) (CSD) will be hosting a [Sustainable Leadership Summit](#) in Bengaluru on Saturday, marking the 20th anniversary of the organisation. The summit will also adopt the 'Bengaluru declaration on Acceleration of Sustainable development goals (SDG).'

Chairman of CSD A Ravindra said the Bengaluru declaration would chart a future course of action towards sustainable development for all stakeholders including government, industry, NGOs and the youth for sustainable development. "The [Sustainability Leadership Summit](#) is the culmination of two decades of work on sustainability issues pertaining to water, waste, energy and environment by CSD. Today these issues have become critical and along with climate change pose serious challenges to the quality of life," said Ravindra who is also the former Chief Secretary of Karnataka.

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ನಗರದಲ್ಲಿ 6 ಜನಕ್ಕೆ ಕೇವಲ ಒಂದೇ ಮರ!

ನಗರದ ವಾಹನ ದಟ್ಟಣೆ ಪರಿಸರಕ್ಕೆ ತೀವ್ರ ಮಾರಕ | ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಕೇಂದ್ರದ ಪರಿಸರ ವರದಿಯಲ್ಲಿ ಮಾಹಿತಿ ಬೆಂಗಳೂರಿನ ಶೇ.93ರಷ್ಟು ಭೂಮಿ ನಿರ್ಮಾಣ ಚಟುವಟಿಕೆಗಳಿಗೇ ಬಳಕೆ | ಇದರಿಂದ ಜೀವ ವೈವಿಧ್ಯ ಕುಸಿತ

• ಕನ್ನಡಪ್ರಭ ವಾರ್ತೆ ಬೆಂಗಳೂರು

ರಾಜಧಾನಿಯಲ್ಲಿ ವಾಹನ ದಟ್ಟಣೆ, ಭೂಬಳಕೆ, ಜೀವವೈವಿಧ್ಯ ಕುಸಿತ ಹಾಗೂ ಹವಾಮಾನ ಬದಲಾವಣೆಯ ಹೆಚ್ಚಾಗಿದ್ದು ನಗರದ ಪರಿಸರಕ್ಕೆ ಮಾರಕವಾಗಿ ಪರಿಣಮಿಸುತ್ತಿದೆ ಎಂದು ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಕೇಂದ್ರ (ಸಿಎಸ್‌ಡಿ) ಸಿದ್ಧಪಡಿಸಿರುವ 'ಬೆಂಗಳೂರು ಪರಿಸರ ವರದಿ 2021' ತಿಳಿಸಿದೆ.

ನಗರದ ಐಎಎಸ್‌ಆರ್‌ಎಲ್‌ಆರ್‌ಆರ್‌ಎಸ್‌ಎಸ್‌ಎಲ್‌ನಲ್ಲಿ ಮಂಗಳವಾರ ಬಿಡುಗಡೆ ಮಾಡಿದ ವರದಿಯಲ್ಲಿ ಗಾಳಿ, ನೀರು, ತಾಜ್ಜ ದಂತಹ ಸಾಂಪ್ರದಾಯಿಕ ಸಮಸ್ಯೆಗಳ ಜತೆಗೆ ಕಳೆದ ಒಂದು ದಶಕದಲ್ಲಿ ವಾಹನ ದಟ್ಟಣೆ, ಭೂಬಳಕೆ, ಜೀವವೈವಿಧ್ಯ ಕುಸಿತ ಹಾಗೂ ಹವಾಮಾನ ಬದಲಾವಣೆ ಸಮಸ್ಯೆಗಳು ನಗರದಲ್ಲಿ ಹೆಚ್ಚಾಗಿವೆ. ಇದರಿಂದ ನಗರದ ಪರಿಸರ ಮತ್ತು ಪ್ರಾಣಿ ಜೀವಿಗಳಿಗೆ, ಅರಣ್ಯ ಸಮಸ್ಯೆಗಳು ಕಾಣಿಸಿಕೊಳ್ಳುತ್ತಿವೆ ಎಂದು ವರದಿಯಲ್ಲಿ ತಿಳಿಸಲಾಗಿದೆ. ನಗರದ ಪರಿಸರಕ್ಕೆ ಮಾರಕವಾಗುವ ಸಮಸ್ಯೆಗಳನ್ನು ಮನೆಗಳ ಸಮೀಪ, ತಟ್ಟು ಅಭಿವೃದ್ಧಿಯಿಂದ ಮೂಲಕ ಸಂಗ್ರಹಿಸಿದೆ.

ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಕೇಂದ್ರ ಈ ಹಿಂದೆ 2005, 2012 ಬೆಂಗಳೂರು ಪರಿಸರ ವರದಿ ನೀಡಿದ್ದು ಈಗ 2021ರಲ್ಲಿ ತನ್ನ ಮೂರನೇ ವರದಿಯನ್ನು ಸಿದ್ಧಪಡಿಸಿದೆ.

ನಿರ್ಮಾಣ ಚಟುವಟಿಕೆಗೆ ಶೇ.93 ಭೂಮಿ



ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಕೇಂದ್ರ (ಸಿಎಸ್‌ಡಿ) ಸಿದ್ಧಪಡಿಸಿರುವ 'ಬೆಂಗಳೂರು ಪರಿಸರ ವರದಿ 2021' ಬಿಡುಗಡೆ ಸಮಾರಂಭದಲ್ಲಿ ಕೇಂದ್ರದ ಅಧ್ಯಕ್ಷ ಡಾ. ಎ. ರವೀಂದ್ರ, ಕಾರ್ಯಕಾರಿ ನಿರ್ದೇಶಕ ಡಾ. ಆರ್. ಶ್ರೀನಿವಾಸ್, ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ ಸದಸ್ಯ ಕಾರ್ಯದರ್ಶಿ ಶ್ರೀನಿವಾಸಲು ಭಾಗವಹಿಸಿದ್ದರು.

ಬಳಕೆ: ಬೆಂಗಳೂರಿನ ಶೇ.93.3ರಷ್ಟು ಭೂಮಿ ನಗರೀಕರಣದ ನಿರ್ಮಾಣ ಚಟುವಟಿಕೆಗಳಿಗೆ ಬಳಕೆಯಾಗಿದೆ. ವಾರ್ಡ್‌ವಾರು ಮರಗಳ ಸಾಂದ್ರತೆ ಪ್ರಮಾಣ ಶೇ.0.18ಂತ ಕಡಿಮೆ ಇದ್ದು ಕಳವೆಯಾಗಿದೆ. ಪ್ರತಿ ಅರು ಮಂದಿಗೆ ಒಂದು ಮರವಿದೆ. ಅರ್ಧದಷ್ಟು ಕೆರೆಗಳು ಒತ್ತವೆಯಾಗಿ ವಿವಿಧ ಚಟುವಟಿಕೆಗಳಿಗೆ ಬಳಕೆಯಾಗುತ್ತಿವೆ. 2015 ಮಾಹಿತಿ ಪ್ರಕಾರ, ಹಸಿರು ಹೊದಿಕೆ 740 ಚದರ ಕಿ.ಮೀದಿಂದ 300 ಚದರ ಕಿ.ಮೀ ಇಳಿಕೆಯಾಗಿದೆ

ಎಂದು ವರದಿಯಲ್ಲಿ ಉಲ್ಲೇಖಿಸಲಾಗಿದೆ. **ನಗರದಲ್ಲಿ 80 ಲಕ್ಷ ವಾಹನ; ಇದರಲ್ಲಿ ಶೇ.70 ದ್ವಿಚಕ್ರ ವಾಹನ:** 2021ರ ಅಂತ್ಯಕ್ಕೆ ನಗರದಲ್ಲಿ ವಾಹನಗಳ ಸಂಖ್ಯೆ 80 ಲಕ್ಷಕ್ಕೆ ಹೆಚ್ಚಳವಾಗಿದ್ದು ಈ ಪೈಕಿ ಶೇ.70ರಷ್ಟು ದ್ವಿಚಕ್ರ ವಾಹನ, ಶೇ.20ರಷ್ಟು ನಾಲ್ಕು ಚಕ್ರ ವಾಹನಗಳಿವೆ. ಇದರಿಂದ ವಾಯು ಗುಣಮಟ್ಟ ಸೂಚ್ಯಂಕ 129ಕ್ಕೆ ತಲುಪಿದೆ. ಇನ್ನು 2012ಕ್ಕೆ ಹೋಲಿಸಿದರೆ ವಾಹನಗಳಿಂದ ಉಂಟಾಗುವ ಮಾಲಿನ್ಯ (ಶಬ್ದ ಮಾಲಿನ್ಯ, ಹೊಗೆ)

ಪರಿಸರ ರಕ್ಷಣೆಗೆ ಸಲಹೆ

- ನಿರ್ವಹಣೆ ಉಳಿಸಲು ನಗರದ ಜನರು, ಪಾಲಿಕೆ ಅಧ್ಯತೆ ನೀಡಬೇಕು
- ಹವಾಮಾನ ಬದಲಾವಣೆ ತಗ್ಗಿಸಲು ನಗರದಲ್ಲಿ ಸೂಕ್ತ ಹವಾಮಾನ ವಲಯ ರಚಿಸಬೇಕು
- ನಿರ್ಮಾಣ ಚಟುವಟಿಕೆಗಳಿಗೆ ಹೊಸ ನಿಯಮ ಅಳವಡಿಸಿಕೊಳ್ಳಬೇಕು.
- ದ್ವಿಚಕ್ರ ವಾಹನಗಳ ಸಂಖ್ಯೆ ತಗ್ಗಿಸಲು ಅಧ್ಯತೆ ನೀಡಬೇಕು.

ಸಂಚಾರ ದಟ್ಟಣೆ ಗಣನೀಯ ಎರಿಕೆಯಾಗಿದೆ ಎಂದು ವರದಿ ತಿಳಿಸಿದೆ.

ಶಬ್ದ ಮಾಲಿನ್ಯ ಸಮಸ್ಯೆ: ವರದಿ ಸಿದ್ಧಪಡಿಸುವ ಸಂದರ್ಭದಲ್ಲಿ ಶೇ.80ರಷ್ಟು ಮಂದಿ ಶಬ್ದಮಾಲಿನ್ಯದಿಂದ ಬಳಲುತ್ತಿದ್ದವೆ. ಪ್ರಮುಖವಾಗಿ ವಾಹನ ದಟ್ಟಣೆ ಮತ್ತು ವಾಣಿಜ್ಯ ಸಂಕೀರ್ಣಗಳಿಂದ ಶಬ್ದ ಮಾಲಿನ್ಯ ಹೆಚ್ಚಿದೆ ಎಂದು ತಿಳಿಸಿದ್ದಾರೆ. ನೀಲಸಂಧ್ಯೆ, ಪಾದರಾಯನಪುರ, ಕಾವೇರಿಪುರ, ಹೊಂಗನಂದ್ರದಲ್ಲಿ ಶಬ್ದ ಮಾಲಿನ್ಯ ಅತ್ಯಧಿಕವಾಗಿದೆ ಎಂದು ವರದಿಯಲ್ಲಿ ಉಲ್ಲೇಖಿಸಲಾಗಿದೆ.





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'Sustainable growth must balance with environment'

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FOREST, environment and ecology minister Eshwar Khandre on Saturday said sustainable development is the key to achieve growth, while preserving nature and environment.

Speaking at the sidelines of the release of the Bengaluru Declaration as a part of the sustainable summit, organised by Centre for Sustainable Development (CSD), Khandre said, humans can survive only if nature, environment and forests are well maintained.

He said Bengaluru is known

as the hub of technological innovation and is also the leader of sustainable development. All those working in Karnataka, especially Bengaluru, should work towards finding solutions to the challenges the world is facing using technology to the optimum. The declaration lists five goals for the city-urbanisation, traffic congestion, pollution, availability of clean air and water and climate action.

Khandre said due to unplanned urbanisation and pollution, the problems of availability of clean water has become a challenge. The theme of the summit, "Leadership for Sustainable

Development and the need for visionary leadership", should be advocated. The benefits of development should also reach the masses, especially the marginalised ones. Priority must be given to inclusive growth, social justice and elimination of inequality. More emphasis should be given to clean energy and reduction of carbon emissions. Good practices should be adopted in the agriculture, energy and health care sectors.

He also added that sustainable development should be introduced at the school education level. He also pointed out that

long term planning was required to achieve the sustainable development goals.

Explaining the goals, chairman of CSD and former chief secretary, A Ravindra, said that in the declaration, action points have been listed but most important of them all is climate action. He said assuming the government has a sound understanding on climate action, stress needs to be given at the ground level for people to act upon. Rise in emissions is the root cause for problems, and hence solutions and implementation at the local level are essential.

ಬೆಂಗಳೂರು ನಗರ

2

ಶುಭವಾರ • ನವೆಂಬರ್ 5, 2023

● ಸಂಚಾರ್‌ವರದಿ: 6.15 ಸಂಚಾರ್‌ವರದಿ: 6.54

☾ ಚಂದ್ರನಾಡು: ಗಾ.ಒ 30° ಅ.ಒ 20°

ಶೇಷಮವಾರ	ಮಂಗಳವಾರ	ಬುಧವಾರ
30° 20'	29° 20'	29° 20'

'ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಶೃಂಗಸಭೆ'ಯಲ್ಲಿ ಅರಣ್ಯ ಸಚಿವ ಈಶ್ವರ ಖಂಡ್ರೆ ಸಲಹೆ 'ಜೀವರಾಶಿ ಉಳಿಯಲಿ, ಜೀವನೋಪಾಯವೂ ಇರಲಿ'

ಪ್ರಸಿದ್ಧಿ ವಾಣಿ

ಬೆಂಗಳೂರು: 'ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಶೃಂಗಸಭೆ'ಯಲ್ಲಿ ಅರಣ್ಯ ಸಚಿವ ಈಶ್ವರ ಖಂಡ್ರೆ ಸಲಹೆ 'ಜೀವರಾಶಿ ಉಳಿಯಲಿ, ಜೀವನೋಪಾಯವೂ ಇರಲಿ' ಎಂದು ಹೇಳಿದರು. ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಶೃಂಗಸಭೆಯಲ್ಲಿ 'ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಶೃಂಗಸಭೆ'ಯಲ್ಲಿ ಅರಣ್ಯ ಸಚಿವ ಈಶ್ವರ ಖಂಡ್ರೆ ಸಲಹೆ 'ಜೀವರಾಶಿ ಉಳಿಯಲಿ, ಜೀವನೋಪಾಯವೂ ಇರಲಿ' ಎಂದು ಹೇಳಿದರು.



ಅರಣ್ಯ ಸಚಿವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಶೃಂಗಸಭೆಯಲ್ಲಿ ಅರಣ್ಯ ಸಚಿವ ಈಶ್ವರ ಖಂಡ್ರೆ ಸಲಹೆ 'ಜೀವರಾಶಿ ಉಳಿಯಲಿ, ಜೀವನೋಪಾಯವೂ ಇರಲಿ' ಎಂದು ಹೇಳಿದರು. ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಶೃಂಗಸಭೆಯಲ್ಲಿ 'ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಶೃಂಗಸಭೆ'ಯಲ್ಲಿ ಅರಣ್ಯ ಸಚಿವ ಈಶ್ವರ ಖಂಡ್ರೆ ಸಲಹೆ 'ಜೀವರಾಶಿ ಉಳಿಯಲಿ, ಜೀವನೋಪಾಯವೂ ಇರಲಿ' ಎಂದು ಹೇಳಿದರು.

'ಅಸ್ಥಿರ ಅಭಿವೃದ್ಧಿಯತ್ತ ನೆಚಿವರ ಹೆಜ್ಜೆ'

'ಜೀವರಾಶಿ ಉಳಿಯಲಿ, ಜೀವನೋಪಾಯವೂ ಇರಲಿ' ಎಂದು ಹೇಳಿದರು. ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಶೃಂಗಸಭೆಯಲ್ಲಿ 'ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಶೃಂಗಸಭೆ'ಯಲ್ಲಿ ಅರಣ್ಯ ಸಚಿವ ಈಶ್ವರ ಖಂಡ್ರೆ ಸಲಹೆ 'ಜೀವರಾಶಿ ಉಳಿಯಲಿ, ಜೀವನೋಪಾಯವೂ ಇರಲಿ' ಎಂದು ಹೇಳಿದರು.

ಅರಣ್ಯ ಸಚಿವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಶೃಂಗಸಭೆಯಲ್ಲಿ ಅರಣ್ಯ ಸಚಿವ ಈಶ್ವರ ಖಂಡ್ರೆ ಸಲಹೆ 'ಜೀವರಾಶಿ ಉಳಿಯಲಿ, ಜೀವನೋಪಾಯವೂ ಇರಲಿ' ಎಂದು ಹೇಳಿದರು.

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A Case Study of 24x7 Water Supply System in Ranebennur, Karnataka

Ranebennur, often referred to as the "Cotton City of Karnataka," is located in Haveri District, approximately 300 km northwest of Bengaluru, at an elevation of 605 meters above mean sea level. The city's population was 106,406 as per the 2001 census, has grown significantly in recent years. This water supply project has been designed to cater to the city's needs for the intermediate design year of 2031 and the ultimate design year of 2046.

The Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC) implemented this prestigious 24x7 Water Supply Project in Ranebennur town under the AMRUT 1.0 initiative. The project funding is structured with a 50% contribution from the Central Government, 20% from the State Government, and 30% from the Urban Local Body.

After competitive bidding process, the contract for the Ranebennur 24x7 Water Supply Scheme was awarded to Veolia India Pvt. Ltd. who has vast experience in this field and successfully completed.

Key features of the project are outlined in Table 1 below.

Table 1. Key features of the project

Parameter	Details
Population Projections	Base Year (2016): 1,17,987 Intermediate (2031): 1,54,461 Ultimate Year (2041): 1,97,064
Source of Water	River Thungabhadra
Water Demand Intermediate -	26.47 MLD 33.47 MLD 33.5
Ultimate -	MLD
WTP Capacity	Total Wards: 35 Wards with 24x7 Supply: 35 Zones: 10
Wards	DMAs: 10 Pipe Network Length: 323 km
Distribution Network	Existing: 4 OHTs (9 LL each), 1 GLSR (13 LL) New: 5 OHTs
Water Storage	(Capacity: 5 LL to 15 LL)

Parameter	Details
House Service Connections (HSCs)	Before 24x7: 15,079 After 24x7 (June 2024): 28,000
Project Cost	₹127.11 Crore - AMRUT (50%) - GoK (20%) - ULB (30%)
Project Duration	4 years 8 months
O&M Details	Start: August 2022 Duration: 8 years Cost: ₹20 crore
Contract Model	Performance-Based Management Contracting
Contractor/Operator	M/s Veolia Water

Continuous Water Supply and Per Capita Rate of Supply

Even with the ambitious provision of continuous water service, it is critical to monitor the actual rate of water supplied per capita daily. Initially, there had been instances of higher water consumption due to factors such as leaks, inefficient usage, or system adjustments during the transition to 24x7 supply. Over time, as the system stabilized and efficiency measures such as metering and leak detection were implemented, the actual rate of supply reduced to a level well-aligned with the standard benchmark of 135 Liters Per Capita Per Day (LPCD), as recommended by the CPHEEO Manual of 1999. This indicates that the project has achieved a balance between ensuring adequate supply and preventing wastage, demonstrating effective water management practices.



Figure 1. Variation in Per Capita Rate of Supply

Non-Revenue Water, which refers to the “difference between bulk water and billed water”, i.e, water lost before reaching consumers due to leaks, theft, or unbilled consumption, was a significant challenge in the system's initial phase. Through targeted interventions, such as:

- Comprehensive Leak Detection and Repair Programs: Addressing aging infrastructure and hidden pipeline faults.
- Metering and Billing Systems: Ensuring all consumed water is accurately measured and billed.
- Community Awareness Initiatives: Educating residents on the importance of conserving water and reporting leaks.

The NRW has been successfully brought below the acceptable threshold of 20%, as shown in the accompanying chart. Maintaining NRW at this level signifies an improvement in operational efficiency and ensures that the water system is sustainable both in resource management and financial terms.

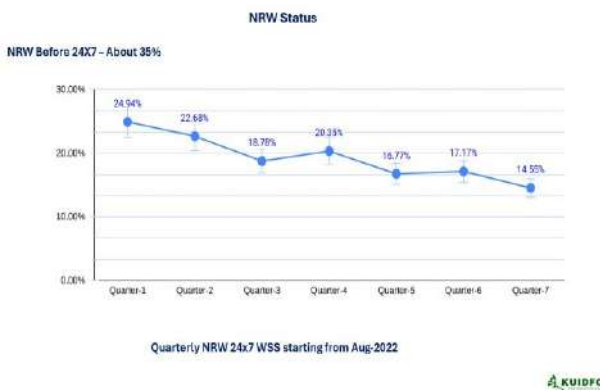


Figure 2. Reduction in Non-Revenue Water (NRW)

Shift in Consumption and Benefits to Urban Poor

The shift from a flat tariff of ₹150 per month to a volumetric tariff led to an increase in both demand and revenue. Monthly demand rose from ₹41 lakhs to ₹46 lakhs, resulting in lower bills of up to ₹56 per month for 67% of customers with lower consumption, primarily among lower-income consumers. Conversely, 33% of customers with higher consumption experienced higher bills (Table 2).

Table 2. Shift in Consumption and Benefits to Urban Poor

Sl. No	Details	Lower Consumption (With <18KL/Month)	%	Higher Consumption (With >18KL/Month)	%
1	Number of HSCs	18,307	67%	9,613	33%
2	Water Consumption	158 ML	24%	491 ML	76%
3	Water Demand – At Flat Tariff	Rs 27 Lakhs	66%	Rs 14 Lakhs	34%
4	Water Demand – At Vol. Tariff (With 24x7 WSS)	Rs 15 Lakhs	23%	Rs 31 Lakhs	67%

The operation and maintenance of 24x7 water services, including customer billing and collection, have been implemented since August 2022 as part of the O&M period, which spans eight years.

Water Quality Management

The water samples collected and tested as per CPHEEO manual for water supply and Treatment, 1999. Water quality testing done in the presence of the consumers and public representatives. The standard Laboratories, External NABL accredited testing laboratory, Govt. District public Health Laboratory, District Surveillance Unit, Haveri and also In-House Ranebennur WTP Laboratory, CMC, Ranebennur. Few Project Photographs are exhibited below.



Below is a comparison of the service levels before and after the implementation of the 24x7 water supply project:

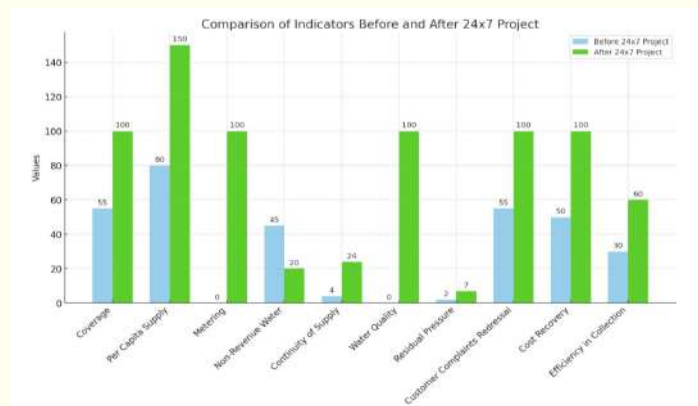


Figure 3. comparison of the service levels before and after the implementation of the 24x7 water supply project

The Ranebennur 24x7 Water Supply Project implemented under AMRUT 1.0 has achieved significant milestones, including universal water access, reduced NRW, efficient per capita supply, and enhanced financial sustainability through a volumetric tariff model, ensuring sustainable urban water management.



Sri Siddaramaiah

Hon'ble Chief Minister, Government of Karnataka



Shri D.K. Shivakumar
Hon'ble Deputy Chief Minister
Government of Karnataka



Shri K. J. George
Hon'ble Minister of Energy,
Government of Karnataka

PIONEERING THE FUTURE OF RENEWABLE ENERGY

- ◆ Karnataka is one among the top 5 states with the highest RE installed capacity in India, holding 3rd position in Solar as well as Wind installed capacity.
- ◆ Karnataka Renewable Energy Policy 2022-27 aims to facilitate the development of 10 GW of additional RE projects including 1 GW rooftop solar PV projects.
- ◆ Karnataka has topped the Indian State's Electricity Transition (SET), a national clean electricity transition framework set by Institute for Energy Economics and Financial Analysis (IEEFA).
- ◆ KREDL was awarded the National Energy Conservation award-2021, 2022 & 2023 consecutively and secured first place in State Performance Awards (Group-1) Category.
- ◆ KREDL was awarded as the Best Nodal Agency for the year 2023 -24 from IWPA during the annual Award function held on 17-08-2024 at Coimbatore.
- ◆ KREDL was awarded second place nationally for the highest wind power capacity commissioned in the year 2023-24
- ◆ The RE installed capacity in the State is 53% of the total installed capacity.



Hon'ble Chief Minister and Hon'ble Energy Minister Shri K.J. George at the 'Raita Soura Shakti Mela,' organized on March 9, 2024, at GKVK premises.



Karnataka Renewable Energy Development Limited

(A Government of Karnataka Undertaking)

#6/13/1, 10th Block, 2nd Stage, Nagarabhavi, Bengaluru-560072.

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ಶ್ರೀ ಸಿದ್ದರಾಮಯ್ಯ
ಪವ್ವನ ಮುಖ್ಯಮಂತ್ರಿಗಳು ಕರ್ನಾಟಕ ಸರ್ಕಾರ



ಕೆ.ಆರ್.ಇ.ಡಿ.ಎಲ್



ಶ್ರೀ ಡಿ. ಕೆ. ಶಿವರಾಮೂರ್ತಿ
ಮಾನ್ಯ ಉಪ ಮುಖ್ಯಮಂತ್ರಿಗಳು
ಕರ್ನಾಟಕ ಸರ್ಕಾರ



ಶ್ರೀ ಕೆ. ಜಿ. ಬಾಬ್ಬಾ
ಮಾನ್ಯ ಇಂಧನ ಸಚಿವರು
ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ನವೀಕರಿಸಬಹುದಾದ ಇಂಧನ ವಲಯದಲ್ಲಿ ಮಹತ್ವದ ಸಾಧನೆ

- ಭಾರತದಲ್ಲಿ ನವೀಕರಿಸಬಹುದಾದ ಇಂಧನದ ಅತ್ಯಧಿಕ ಸ್ವಾತಂತ್ರ್ಯ ಸಾಮರ್ಥ್ಯ ಹೊಂದಿರುವ ಮೊದಲ 5 ರಾಜ್ಯಗಳಲ್ಲಿ ಕರ್ನಾಟಕವು ಒಂದಾಗಿದೆ. ಸೌರ ಶಕ್ತಿ ಹಾಗೂ ಪವನ ಬಿದ್ಡುತ್ ಉತ್ಪಾದನೆ ಸಾಮರ್ಥ್ಯ ಎರಡರಲ್ಲೂ ರಾಜ್ಯವು ದೇಶದಲ್ಲಿ 3 ನೇ ಸ್ಥಾನ ಹೊಂದಿದೆ.
- 1 ಕರ್ನಾಟಕ ನವೀಕರಿಸಬಹುದಾದ ಇಂಧನ ನೀತಿ 2022-27 ನ್ನು ಜಾರಿಗೆ ತಂದಿದ್ದು 1 ಗಿಗಾವ್ಯಾಟ್ ಸಾಮರ್ಥ್ಯದ ಸೌರ ಮೇಲ್ವಿಚಾರಣೆ ಯೋಜನೆಗಳನ್ನು ಸೇರಿ ಒಟ್ಟಾರೆ 10 ಗಿಗಾವ್ಯಾಟ್ ಸಾಮರ್ಥ್ಯದ ನವೀಕರಿಸಬಹುದಾದ ಇಂಧನ ಯೋಜನೆಗಳನ್ನು ಗ್ರಿಡ್ಗೆ ಹೆಚ್ಚುವರಿಯಾಗಿ ನೀಡುವ ಮೂಲಕ ಅಭಿವೃದ್ಧಿಗೆ ಅನುಕೂಲ ಕಲ್ಪಿಸುವ ಗುರಿಯನ್ನು ಹೊಂದಿದೆ.
- Institute for Energy Economics and Financial Analysis (IEEFA) ರವರು ರಾಷ್ಟ್ರೀಯ ಶುದ್ಧ ಬಿದ್ಡುತ್ ಪರಿವರ್ತನಾ ಅಯಾಮಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ನಡೆಸಿದ ಮೌಲ್ಯಮಾಪನದಲ್ಲಿ ಕರ್ನಾಟಕ ರಾಜ್ಯವು ಅಗ್ರಸ್ಥಾನದಲ್ಲಿದೆ.
- ಕೆ.ಆರ್.ಇ.ಡಿ.ಎಲ್ ಸಂಸ್ಥೆಗೆ ರಾಷ್ಟ್ರೀಯ ಇಂಧನ ಸಂರಕ್ಷಣಾ ಪ್ರಶಸ್ತಿ-2021, 2022 ಮತ್ತು 2023 ಅನ್ನು ಸತತವಾಗಿ ರಾಜ್ಯ ಕಾರ್ಯಕ್ರಮಕ್ಕೆ ಪ್ರಶಸ್ತಿಗಳ (ಗುಂಪು-1) ಬಿಭಾಗದಲ್ಲಿ ಪ್ರಥಮ ಸ್ಥಾನವನ್ನು ನೀಡಲಾಗಿರುತ್ತದೆ.
- IWPA ವಕೀಯಿಂದ 2024ರ ಆಗಸ್ಟ್ 17ರಂದು ಕೊಯಮತ್ತೂರಿನಲ್ಲಿ ಹಮ್ಮಿಕೊಳ್ಳಲಾದ ವಾರ್ಷಿಕ ಪ್ರಶಸ್ತಿ ಸಮಾರಂಭದಲ್ಲಿ ಕ್ರೆಡಲ್‌ಗೆ 2023 -24ನೇ ಸಾಲಿನ ಅತ್ಯುತ್ತಮ ನೋಡಲ್ ಏಜೆನ್ಸಿ ಎಂಬ ಪ್ರಶಸ್ತಿ ಸಂದಿದೆ.
- 2023-24ನೇ ಸಾಲಿನಲ್ಲಿ ಅನುಷ್ಠಾನಗೊಳಿಸಿದ ಪವನ ಬಿದ್ಡುತ್ ಸಾಮರ್ಥ್ಯಕ್ಕಾಗಿ ಕ್ರೆಡಲ್‌ಗೆ ರಾಷ್ಟ್ರ ಮಟ್ಟದಲ್ಲಿ ಎರಡನೇ ಪ್ರಶಸ್ತಿ ದೊರೆತಿದೆ.
- ರಾಜ್ಯದ ಒಟ್ಟು ಸ್ವಾತಂತ್ರ್ಯ ಬಿದ್ಡುತ್ ಸಾಮರ್ಥ್ಯದಲ್ಲಿ ನವೀಕರಿಸಬಹುದಾದ ಇಂಧನ ಮೂಲದ ಕೊಡುಗೆಯು ಶೇಕಡ 53 ಆಗಿರುತ್ತದೆ.



ಜಿಕೆವಿಕೆ ಅವರಣದಲ್ಲಿ 2024ರ ಮಾರ್ಚ್ 9ರಂದು ನಡೆದ 'ಶೈಲ ಸೌರ ಶಕ್ತಿ ಮೇಳ'ದಲ್ಲಿ ಮಾನ್ಯ ಮುಖ್ಯಮಂತ್ರಿಗಳೊಂದಿಗೆ ಮಾನ್ಯ ಇಂಧನ ಸಚಿವರಾದ ಶ್ರೀ ಕೆ.ಜಿ. ಬಾಬ್ಬಾ ರವರು.

ಕರ್ನಾಟಕ ನವೀಕರಿಸಬಹುದಾದ ಇಂಧನ ಅಭಿವೃದ್ಧಿ ನಿಯಮಿತ
(ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಅಧೀನಕ್ಕೆ ಒಳಪಟ್ಟಿದೆ)
ಕಾರ್ಪೊರೇಟ್ ಕಛೇರಿ 6/13/1, ಕೆ.ಆರ್.ಇ.ಡಿ.ಎಲ್ ಕಛೇರಿ ಕಟ್ಟಡ,
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An article by Karnataka Soaps and Detergents Limited (KSDL)



A ground-breaking innovation by one of the finest visionaries of the century gone by, the then Maharaja of Mysore, Nalwadi Krishnaraja Wodeyar, the extraction of oil from Sandalwood was introduced as a means of optimally utilizing this rich natural resource of Mysuru. Together with the expertise of renowned industrial chemist, Sri S.G. Shastri, and the Dewan of Mysore, Sir M. Visveswaraya, Mysore Sandalwood Oil Factory was established in 1916. Thereafter, Government Soap Factory was established in Bangalore to manufacture the World famous "Mysore Sandal Soap" from the Sandalwood oil, which is celebrated for its quality, fragrance, and traditional use of sandalwood, making it a favorite among consumers. There has been no stopping its steady rise since. The company is now considered the makers of the purest Sandalwood oil and Sandalwood oil-based soap in the world. In the year 1980, the company became a public entity and officially became what we now know as the Geographical Indication (GI) bearing Karnataka Soaps & Detergents Ltd.,(KS&DL) offering a wide range of products spanning rejuvenating bathing soaps to refreshing cosmetics. The company is now into its 108 years Mysore Sandal Soap embodies Karnataka's culture and values through its rich heritage, purity, and craftsmanship

The soap is accredited with Geographical Indication (GI) during the year 2006, thus is a product with special qualities and characteristics derived from its geographical origin, which helps protect its reputation and authenticity.

The sandalwood industry has played a significant role in Karnataka's history and continues to be a source of pride for the state. Therefore, it is not surprising that Mysore Sandalwood products are often referred to as the true treasures of Karnataka, showcasing the region's natural wealth and cultural significance.

FORAY INTO INTERNATIONAL MARKETS

The company has six branches (located at Bangalore, Chennai, Hyderabad, Mumbai, Kolkata & New Delhi) to cater to Domestic Markets across the country. Besides, the company is also exporting its range of products to countries like UAE, Kuwait, Saudi Arabia, Bahrain, Qatar, USA, U.K., France, China, Malaysia, Singapore, Taiwan, Australia, Hong Kong etc.

CERTIFICATES & AWARDS

The Flagship & Iconic Brand "Mysore Sandal Soap" has been accredited with Geographical Indication Registry along with the "Mysore Sandalwood Oil". The Company is certified with ISO 9001-2015 for Quality Assurance and with ISO 14001-2015 for Environment Policy. It is also accredited with GMP (Good Manufacturing Practices) Certificate. The Company has received various accolades such as Export Performance for the year 2006-07, 2012-13, 2017-18 by CHEMIXIL (set-up by Ministry of Commerce & Industry, Govt. of India); National Award for Excellence in Cost Management for the year 2012 & 2016, by Institute of Cost Accountants of India, Company was awarded "Samman Patra" for outstanding revenue performance for the year 2015-16 by Central Excise, Ministry of Finance, Govt. of India, and the Coveted Chief Minister's "Karnataka Ratna Award" in the year 2010, 2016-17, 2018-19 for excellence in progressive growth.

The Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry, Government of India, has presented the National Intellectual Property Awards 2021 & 2022 to "Mysore Sandal Soap" for Most Popular Geographical Indication (GI) in India by Public Polling.



UNIQUE RANGE OF PRODUCTS

The Company manufactures around 50 different products ranging from Soaps, Detergents, Cosmetics, Agarbathies etc. The products like Mysore Sandal Soap, Mysore Sandal Gold Soap, Centennial Soap, Mysore Sandal Classic Soap, Mysore Carbolic Soap, Rose Soap, Mysore Bar Soap, Mysore Sandal Agarbathies, Mysore Sandal Dhoop, Mysore Sandal Talcum Powder, Kleenol Multipurpose Liquid Detergent, Freshnol Perfumed Phenyl etc. are the notable brands which are very popular in the market and have earned the trust of consumers over the years. Another unique product from the iconic "House of Mysore Sandal" is Mysore Sandal Millennium Soap which has become most popular brand in the Super Premium Soap category in the country. The product contains pure natural sandalwood oil, added with other key essential oils, Almond oil, Glycerine, etc. The success of Mysore Sandal Soap can be attributed to several key factors:

Heritage and Quality: Launched in 1916, it is the only soap globally made from 100% pure sandalwood oil, ensuring a unique quality and aroma that resonates with consumers' preferences for natural products.

Innovative Marketing: The brand employed creative marketing strategies, including distinctive packaging and memorable advertising campaigns from many decades, which helped establish strong brand recognition.

Establishment of marketing networks: The company has established its own Marketing Branches across India covering length of breath of the country with its own field staff who covers the market daily and strong distribution network presence, along with its own C&FA.

Cultural Significance: As a product deeply rooted in Karnataka's heritage, it symbolizes purity and tradition, appealing to both domestic and international markets.

Sustainability Initiatives: The company emphasizes sustainable practices, including a sandalwood plantation program, ensuring long-term viability despite challenges in sandalwood availability.

These elements collectively contribute to its enduring popularity and market presence.

Mysore Sandal Soap stands out due to its unique qualities:

Pure Ingredients: It is made from 100% natural sandalwood oil, renowned for its antiseptic and soothing properties, setting it apart from competitors that may use synthetic fragrances or additives.

Heritage and Authenticity: Established in 1916, the brand carries a rich legacy tied to Karnataka's sandalwood heritage, evoking nostalgia and trust among consumers.

Diverse Product Range: Beyond the classic soap, it offers variants like Mysore Sandal Gold and Millennium, enriched with additional natural ingredients for enhanced skin benefits.

Sustainability: KSDL emphasizes sustainable practices in sourcing sandalwood, ensuring long-term availability and environmental responsibility.

These factors contribute to a strong brand identity and customer loyalty.

In FY 2023-24, KS&DL reported a turnover of ₹1,570 crore, marking a 14.25% increase from the previous year with a net profit of around ₹362.00 Crores and setting a new record for the company.

KS&DL aims to enhance production capacity with a additional soap plant and has taken up plans to introduce various new products, such as Turmeric Soap, Cologne Soap, Lime & Deo Soap, Transparent Soap, Shower Gels, Pooja Oil, Scented Candles, Kajol & Color Cosmetics, Perfumes & Fine Fragrances, new range of Agarbathies etc. aiming for a turnover target of ₹5,000 Crore in the coming years.

**Truly, it is India's Pride,
World's Choice**



Details of the Schemes being implemented during the year 2024-25:

For the overall development of Scheduled Caste people and to eliminate their economic inequality, the Government of Karnataka has set up a Schedule caste and Schedule Tribes Development Corporation under the Companies Act, 1956 in 20.03.1975. Later on The Development corporation has been Renamed as Dr. B.R. Ambedkar Development Corporation Limited in 13.10.2005.

The total population of Scheduled Castes in the state is 10474991 in which the total population of sub-castes under Dr. BR Ambedkar Development Corporation is 4526973. Since the inception of the Corporation till date, granted subsidy and loan facility of Rs.605674.68 lakhs has been provided to 1213222 beneficiaries.

Since the inception of the Corporation till date new schemes have been added and only the subsidy has changed in the existing schemes and there has been no major change in the schemes. Therefore, if the following changes are adopted keeping in mind the current situations in the various schemes being implemented in the corporation, the economic level of the beneficiaries will improve and the purpose of the corporation will be fulfilled.

1. Self Employment (Direct Loan) Scheme:

Under the Self-Employment Direct Loan Scheme, the scheduled caste unemployed youth and women will be provided loan facility for small economic activities such as fruit and vegetable, fish, meat sale, cow/sheep/pig/rabbit rearing etc. at a unit cost of Rs.1,00,000/- Rs.50,000/- subsidy and 50,000/- will be the loan. Interest is charged at 4% per annum on the loan amount. The said money has to be repaid to the corporation in 36 equal installments.

The following changes can be made under the above scheme:

It is observed that many beneficiaries take loans under the scheme and do not start any purposeful or profitable activities. So the following changes can be made under this scheme.

1. Beneficiaries selected by the RootSet Institution/Animal Husbandry Department are to be trained for 03 to 07 days on starting profitable activities, market opportunities and rearing the livestock and running the units profitably.

2. After disbursement of the first installment, Taluk Development Officers should coordinate with the beneficiaries to start profitable activities and assist them in marketing the products.

3. Conducting Step-by-step training programs to improve the quality of products produced by said beneficiaries.

4. To create an awareness platform for the products manufactured by the said beneficiaries by developing an online marketing website by the corporation and enabling them to sell the products.

2. Business Development Scheme: I.S.B. (In association with Banks)

1. Under this scheme, the subsidy of 20% on loan amount or maximum subsidy of Rs.1.00 lakh will be provided on the loans from commercial banks for income generating activities of Scheduled Caste youths and remaining portion will be bank loans.

2. A scheme is being implemented with subsidy and bank loan from the Corporation to start self-employment units for Scheduled Caste unemployed youth and women in small scale industry, service sector and business sector under the Entrepreneurship Development Scheme. A subsidy of 70% of the unit cost or a maximum of Rs.2.00 lakh subsidy will be provided for business activity except Vehicle purchase and the rest will be bank loan.

3. Under Swavalambi Sarathi Scheme: Subsidy of 75% of the unit cost or maximum of Rs.4.00 lakhs will be provided for goods transport/tourist vehicle purpose and remaining amount will be bank loan.

5. Ganga Kalyana Yojana -Individual Borewell/Lift Irrigation:

Under the Ganga Kalyana Scheme, the small and very small farmers of Scheduled Castes having minimum 1.20 acre to maximum 5.00 acre land will be provided with bore well, pump set installation, electrification and irrigation facility in their dry/Khushki lands. The total unit cost of this scheme will be Rs.3.75 lakhs per beneficiary (Subsidy of Rs.3.25 lakhs and loan will be Rs.0.50 lakhs) and the unit cost will be Rs.4.75 lakhs for Bangalore City, Bangalore Rural, Chikkaballapur, Tumkur, Kolar and Ramnagar districts only (Subsidy of Rs.4.25 lakhs and loan will be Rs.0.50 lakhs).

Lift Irrigation Scheme:

This project was implemented in the Dry/ Khushki lands of Scheduled Caste small and micro farmers adjacent to naturally flowing rivers, streams and canals. Irrigation facility will be provided from the mentioned water sources by pumping water through 10 HP motor pumpset and PVC pipes. Under this scheme, the adjacent lands of at least 03 beneficiary families and near to natural water sources, mass irrigation facility will be provided to the lands of minimum 8 acres up to 15 acres at a unit cost of Rs.9.00 lakhs.

Documents to be submitted by beneficiaries along with online application:

1. Applicant's photo.
2. Caste certificate
3. Annual income certificate of the family
4. Copy of Ration Card/Voter ID Card/Aadhaar Card
5. Project Report / Price list
6. Should have relevant driving license and badge in case of vehicle.
7. Training or experience certificate if any, should be submitted, related to the loan facility sought by the applicant

General Eligibility conditions to avail facility in Dr.B.R.Ambedkar Development Corporation:

1. Applicant should belong to sub caste of Scheduled Caste community falls under Dr. B.R. Ambedkar Development Corporation. And they Should be resident of Karnataka state from last 15 years.
2. Applicants should be in the age limit of minimum 21 years to maximum of 56 years to get the facility under ISB Scheme.
3. Applicants should be in the age limit of minimum 21 years to maximum of 60 years to get the facility under schemes which are directly implementing by the Corporation and Agriculture & allied activities
4. No member of the applicant's family should be employed in a Govt./Semi Govt.
5. The applicant or his family should not have benefited under any scheme from the Corporation earlier.
6. The annual income of the applicant's family should be within the limit of Rs.1,50,000/- in rural areas and Rs.2,00,000/- in urban areas.
7. If the applicant is already registered in the District Disability Welfare Officers office in the district, the Scheduled Caste disabled beneficiaries will be provided facilities directly after verification by the District Manager and the related document should be submitted.
8. Beneficiary to avail facility under Land purchase Scheme should be landless female agricultural labour. And the seller of the land owner should not belong to schedule caste & Tribes.
9. Under Ganga Kalyana scheme the beneficiaries should be small and marginal farmers and the applicant should have completed at least 21 years and recently the upper age limit has been removed.
10. Must have driving license and badge to avail vehicles under schemes.



Sri Siddaramaiah
Hon'ble Chief Minister

Sri D.K. Shivakumar
Hon'ble Deputy Chief Minister

KSIC Mysore Silk

a Mark of
Karnataka's Heritage



KARNATAKA SILK INDUSTRIES CORPORATION LTD.

(A Government of Karnataka Enterprise)

3rd & 4th Floor, Public Utility Building, M.G. Road, Bengaluru-1

Ph. +91 80 25586550, 25586402, 25586399

e-mail: sales@ksicsilk.com or info@ksicsilk.com

For online sales visit website: www.ksicsilk.com

Smt. Kaneez Fathima, M.A.
Chairperson, KSIC Bengaluru,
MLA from Kalaburagi North Constituency

Smt. Zehera Naseem, IAS
Managing Director,
KSIC

Pure Gold Zari & Pure Silk Saree

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BANGALORE METROPOLITAN REGION DEVELOPMENT AUTHORITY



ROLES AND RESPONSIBILITIES

URBAN AND REGIONAL PLANNING AND DEVELOPMENT

- Prepare and enforce master plans
- Identify areas for new townships
- Regulates land use, zoning, and building regulations

INFRASTRUCTURE DEVELOPMENT

Development of infrastructure projects such as roads, bridges, public transport systems, water supply and sewage treatment.

COORDINATION AND COLLABORATION

Works with various government departments and local authorities to facilitate integrated development.

SUSTAINABLE URBAN DEVELOPMENT

Promote sustainable urban growth through initiatives that reduce environmental impact, improve quality of life, and ensure economic development.

REGULATION AND MONITORING

Monitoring and controlling the development activities



FUNCTIONS



Actions

MASTER PLANNING

- Formulation of master plans for urban and regional development,
- Preparing regional planning frameworks to accommodate future growth.

ENVIRONMENTAL AND SUSTAINABILITY INITIATIVES

- Initiating projects focused on water conservation, waste management, and pollution control.
- Developing green spaces, parks, and urban forests to improve the city's air quality and provide recreational areas.

PROMOTING AFFORDABLE HOUSING

To accommodate the region's growing population. Identifying areas for residential development and facilitating the creation of housing for all income groups.

DEVELOPMENT OF GROWTH CENTERS

- Encouraging the development of townships and growth centers to reduce the pressure on Bengaluru's core areas.
- Promoting economic activities and industrial development in these centers to generate employment and balanced growth.
- Develops and maintains green belts, urban forests, parks, and gardens to enhance biodiversity and develop regional park
- Ensures sustainable water management practice.

AUTHORITIES CONSTITUTED FOR THE RESPECTIVE LOCAL PLANNING AREAS IN BMR :

1. Anekal Planning Authority (APA),
2. Bangalore International Airport Area Planning Authority
3. Hoskote Planning Authority (HPA),
4. Kanakapura Planning Authority (KPA),
5. Magadi Planning Authority (MPA),
6. Nelamangala Planning Authority [NPA],
7. Satellite Town Ring road Planning Authority [STRRPA]
8. Channapatna Planning Authority,
9. Doddabalapura Planning Authority [DPA]
10. Ramanagara Urban Development Authority [RUDA],
11. Greater Bengaluru Development Authority [GBDA]



KARNATAKA STATE MINERALS CORPORATION LIMITED

(Government of Karnataka undertaking)

Treasure House of Minerals

The company was established in 1966 with the main objectives of :

- Systematic and eco-friendly mining activities
- Extraction and Marketing of Minerals and Granite in the state
- Evolved as a major player in the production of Iron ore, Granite & many other minerals, adopting modern technology.

Minerals produced by KSMCL



Working of Mines and Quarry



"Conserve Natural Resources"

Regd. Office : TTMC Building, 'A' Block, 5th floor, BMTCL, Shantinagar, Bengaluru - 560027.
Ph: +91 80 22278813 / 14 /15/ 16 Fax: +91 80 22213172 www.ksmc.karnataka.gov.in



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Karnataka Skill Development Corporation

Catalyzing Skill Development and Empowerment in Karnataka

The Karnataka Skill Development Corporation (KSDC) has been at the vanguard of the state's efforts to create a skilled and employable workforce. As a key player in Karnataka's skill development ecosystem, KSDC has successfully implemented a wide range of initiatives aimed at enhancing the capabilities of the state's youth, addressing industry demands, and fostering an environment of continuous learning and innovation.

'Kalike Jothege Kaushalya' Initiative

In alignment with the Karnataka Government's 2023-24 Budget, KSDC introduced the 'Kalike Jothege Kaushalya' initiative, aimed at integrating skill development with formal education in collaboration with Department of Higher Education & Collegiate Education. This program is designed to equip students with practical skills that complement their academic learning, thereby enhancing their employability upon graduation by engaging Industries for training. The initiative reflects KSDC's commitment to ensuring that Karnataka's youth are not only academically qualified but also industry-ready.

Career Planning Program

KSDC has also led a comprehensive Career Planning Program targeted at students in government high schools and pre-university colleges in collaboration with the Samagra Shikshana Karnataka. This initiative provides students with the guidance needed to make informed career choices, helping them to align their educational paths with market needs. The program includes career counseling, aptitude testing, and exposure to various industries, empowering students to pursue careers that match their skills and interests.

Industry Linkage Cell

The Industry Linkage Cell (ILC) of KSDC plays a pivotal role in bridging the gap between academia and industry, fostering partnerships that ensure students are equipped with relevant and up-to-date skills. Through collaborations with leading companies, the ILC adheres to the National Skill Qualification Framework(NSQF) for delivering training programs by partnering with the Industries to utilise their own infrastructure and assure placements in their domain of expertise. This initiative not only enhances the employability of students but also ensures that the skills imparted are directly aligned with the needs of today's job market.

Future Skills Program

The Future Skills program by KSDC is dedicated to preparing Karnataka's youth for the jobs of tomorrow by focusing on emerging technologies such as Artificial Intelligence, Cybersecurity, Data Analytics, Blockchain, and Robotics. This initiative offers specialized training in high-demand areas, ensuring that students are equipped with cutting-edge skills necessary for thriving in a rapidly evolving technological landscape. By investing in these future-oriented programs, KSDC is ensuring that Karnataka's workforce remains competitive and ready to meet the challenges of a dynamic global economy with respect to the Emerging Technologies.

English Language Labs and NSQF Content Localization

To further enhance the global competitiveness of Karnataka's workforce, KSDC has established English Language Labs across the state. These labs are designed to improve the communication skills of students and job seekers, particularly in English, which is a critical skill in the global job market. Additionally, KSDC has localized content for various job roles under the National Skills Qualification Framework (NSQF), ensuring that training is relevant to the local context while meeting national standards.

Support for Overseas Job Seekers

Recognizing the aspirations of many young people to work abroad, KSDC has been working through International Migration Centre - Karnataka (IMCK) to support overseas job seekers. This includes specialized training programs, pre-departure orientation training, and assistance with placement in foreign job markets. These efforts have opened up new avenues for Karnataka's youth, enabling them to explore global opportunities and contribute to the state's reputation as a source of skilled talent.

Through these and many other initiatives, KSDC continues to lead the way in creating a skilled, adaptable, and globally competitive workforce in Karnataka. As the state's economy evolves, KSDC remains committed to its mission of empowering individuals with the skills and opportunities they need to succeed.



BENGALURU SMART CITY LIMITED



The core objective of Bengaluru Smart City Limited is to facilitate a city with good infrastructure, decent quality of life, and a sustainable environment using the application of 'Smart Solutions.'

The focus is on sustainable and inclusive development with the ideology to look at compact areas and create a replicable model that will be a light house to other aspiring cities.

Our vision for Bengaluru Smart City is "Liveable Bengaluru- Healthy, Connected & Vibrant". While planning our projects we inculcated the ideas of Citizen Centric Development, Sustainable Designs, Smart and Safe Solutions. Based on multiple stakeholder consultations we have planned various projects that revive the Historic Economic Centres (Development of Markets), Revitalize the historic heart of the city through development of Tender Sure Roads, Creating Integrated Mobility Hubs, Place Making in prominent places in the city, Support for medical care, enhancing the mobility network, reviving parks, ponds and core infrastructure, digitalizing governance etc.

All the projects planned are strategically placed through the Area Based Development and Pan City. These projects will bridge the gap between the existing infrastructure and smart infrastructure development.

CLASSIFICATION - TYPE OF PROJECTS

1. SCM Projects: Bengaluru Smart City under Smart City Mission has taken up Area-based Development and Pan City Projects

a. Under Area Based Development, 36 roads were taken up for the comprehensive development under Tender Sure Guidelines at the cost of Rs. 481.65 Cr. for a length of 30km & at the cost of Rs.180.65 Cr. projects. were taken up for the Rejuvenation of Historical economic centres, Redevelopment of parks and Heritage Buildings in Bengaluru.

b. Under Pan City, at the cost of Rs. 262.02 Cr. projects were taken up for the Smart IT Solutions, Mobility, Health Infrastructure and Logistics and for Retrofitting & Rehabilitation works.

2. Convergence Projects: Bruhat Bengaluru Mahanagara Palike has taken up the works at the cost of Rs.91.83 Cr. for the redevelopment of arterial and sub arterial roads.

3. PPP Projects: Projects based on Public Private Partnership

We envisage to create an impact of the saying from Namma Bengaluru to Namma Smart Bengaluru.





CREATING A SEAMLESS COMMUTE FOR BENGALUREANS

Salient Features



- A Special Purpose vehicle entrusted with the responsibility of implementation and operation of Bangalore Metro Rail Project.
- Offers comprehensive connectivity, convenience, comfort affordability, reliability, safety with adoption of innovative technologies for energy optimisation.
- First Metro Rail in India to adopt 750 V DC Third rail bottom collection system.
- "First Metro in Global Transit Space to introduce End-to-End ticketing system on WhatsApp Chatbot.
- Member of Community of Metro Bench Marking Group (COMET).
- Implemented energy conservation measures by use of efficient systems in its operations and adopting green initiatives for tapping through renewable sources of energy.
- Operating at a punctuality of 99.85%, providing reliable service on a daily basis to over 8 lakhs commuters.
- As on date Namma Metro has an operational network of 73.81 km which is the second largest Metro network in the country.
- The State-of-the-Art technology trains for Yellow Line (Reach-5) from R V Road to Bommasandra consisting of 16 stations and stretch of 19.15 km is equipped with Communication Based Train Control (CBTC) system enabling Unattended Train Operations (UTO) for enhanced supervision capability from Operations Control Centre (OCC).

Bangalore Metro Rail Corporation Limited

(A joint venture of Govt. of India and Govt. of Karnataka)

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ಬೆಂಗಳೂರು ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಮಂಡಳಿ



Bangalore Water Supply and Sewerage Board

ಶ್ರೀ ಡಿ.ಕೆ. ಶಿವಮೂರ್ತಿ
ಮಂತ್ರಿ ಲಾಭ ಮುಖ್ಯಮಂತ್ರಿಗಳು,
ಅರಸೀಕೆರೆ, ಬೆಂಗಳೂರು ನಗರ
ಸರ್ಕಾರದ ಸಚಿವರು



ಸುಸ್ಥಿರ ನೀರಿನ ಬಳಕೆಗೆ ಅನುವು ಮಾಡುವ ಪಂಚಸೂತ್ರಗಳು

- ನೀರಿನ ಉಳಿತಾಯ ಮಾಡುವಂತಹ ತಂತ್ರಜ್ಞಾನಗಳನ್ನು ಅಳವಡಿಸಿಕೊಳ್ಳುವುದು.
- ಸಂಸ್ಕರಿಸಿದ ನೀರಿನ ಬಳಕೆಯನ್ನು ಹೆಚ್ಚಿಸಿಕೊಳ್ಳುವುದು.
- ಹೊಸ ವಾಹಿಗಳ ಬಳಕೆಯಲ್ಲಿ ತಂತ್ರಜ್ಞಾನದ ಅಳವಡಿಸಿದ ಮಾದಿರಿಕೊಳ್ಳುವುದು.
- ಮಳೆ ನೀರು ಇಂಗು ಗುಡಿಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊಳ್ಳುವುದು.
- ಈ ಎಲ್ಲಾ ಹೊಸ ಅನುಷ್ಠಾನಗಳ ಬಗ್ಗೆ ಗ್ರಾಹಕರಿಗೆ ಹಾಗೂ ಸ್ಟಾಲ್ಡಿಂಗ್ ಮಾಹಿತಿಯನ್ನು ಕೊಡುವ ಮೂಲಕ ನೀರಿನ ಉಳಿತಾಯದ ಮಹತ್ವವನ್ನು ಸಾರುವುದು.

PANCHASUTRAS for Sustainable Water Use

- **Embracing Water-Saving Innovations** - Adopting advanced water-saving technologies to reduce wastage and optimize usage.
- **Expanding Treated Water Utilization** - Prioritizing the use of treated water in multiple sectors to conserve resources.
- **Modernizing Tube Well Systems** - Integrating advanced technology to enhance efficiency in tube well usage.
- **Investing in Rainwater Harvesting** - Installing rainwater catchment pits to replenish groundwater and reduce dependency on external sources.
- **Promoting Water Conservation Awareness** - Actively educating customers and staff on the significance of water-saving initiatives.

Through effective implementation of these Panchasutras, the Bangalore Water Supply and Sewerage Board (BWSSB) has successfully mitigated the challenges of summer water shortages.



ಕಾವೇರಿ 5ನೇ ಹಂತ

- ಮನೆ ಮನೆಗೆ ಕಾವೇರಿ ನೀರು - ಇದು ಸಮೃದ್ಧ ಬೆಂಗಳೂರು.
- ಖ್ಯಾತ ಬೆಂಗಳೂರು ನಗರವನ್ನು ವಾಹಲ್ ಫರ್ವರ್ ಮಾಡುವ ಗುರಿಯಲ್ಲಿ.
- ಬೆಂಗಳೂರು ನಗರವನ್ನು ಜಲಾನಯನಗೊಳಿಸುವ ಗುರಿಯಲ್ಲಿ ಯಶಸ್ವಿ.
- ದೇಶದ ಅತಿದೊಡ್ಡ 775 ಎಂ.ಎಲ್.ಡಿ ನೀರನ್ನು ಟ್ರಿಕೋಮೆಂಟ್ ಮಾಡುವ ಖ್ಯಾತ ಹಂಪನಿಯೇರಿಂಗ್ ಯಾರ್ಡ್.
- 110 ಹಳ್ಳಿಗಳ 50 ಲಕ್ಷ ಭೂಮಿಗಳಿಗೆ ಐವ್ವು ನೀರು ಫೂಡ್ಲೆ.
- 4336 ಕೋಟಿ ರೂಪಾಯಿ ವೆಚ್ಚದ ಖ್ಯಾತ ಯೋಜನೆ 4 ಲಕ್ಷ ಮನೆ ಸಂಪರ್ಕ.

CAUVERY 5th STAGE A Watershed Moment for Prosperous Bengaluru

- **Delivering Cauvery Water, Home to Home** - Binging water directly to the people, redefining Bengaluru's growth and prosperity.
- **Building a Water-Surplus City** - Transforming Bengaluru into a water-rich metropolis with a future-focused approach.
- **Asia's Largest Water Treatment Marvel** - A staggering 775 MLD capacity, showcasing world-class engineering and sustainable development.
- **Reaching 50 Lakh Beneficiaries** - Extending clean, reliable water supply to residents across 110 villages.
- **Major Project Investment** - An ₹.336 crore initiative providing 4 lakh new water connectors to meet the city's growing demands.



ಸಂಸ್ಕರಿಸಿದ ನೀರಿನ ಬಳಕೆ- ಏಷ್ಯಾ ಖಂಡಕ್ಕೆ ಮಾದರಿ

- ಪ್ರತಿ ದಿನ 1450 ಎಂ.ಎಲ್.ಡಿಯನ್ನು ಸ್ವಚ್ಛ ನೀರು ಉತ್ಪಾದಿಸುತ್ತಾ.
- ದಾಖಲಾತಿ ಮಾಡಿರುವುದರಿಂದ ಅತ್ಯಧಿಕ ತಂತ್ರಜ್ಞಾನದ ಸ್ವಚ್ಛ ನೀರು ಸಂಪೂರ್ಣ ಫಲಕಾಳು.
- ಸಂಸ್ಕರಿಸಿದ ನೀರಿನ ಶೇಕಡಾ 90 ರಷ್ಟು ನೀರು ಮರುಬಳಕೆ ಮಾಡುವಲ್ಲಿ ಯಶಸ್ವಿ.
- ಕಟ್ಟಡ ನಿರ್ಮಾಣಕ್ಕೆ ಸಂಸ್ಕರಿಸಿದ ನೀರು ಬಳಕೆ ಕಲ್ಪಿಸುವ ಮೂಲಕ ಸುಸ್ಥಿರ ಯೋಜನೆಗಳ ಅನುಷ್ಠಾನ.
- ಅನುಪ್ರಾಪ್ತ ತೊರೆದಿರುವುದರಿಂದ ತಂತ್ರಜ್ಞಾನದ ಮೂಲಕ ನಿರೀಕ್ಷಿಸಿದ ಉತ್ಪಾದನೆಯನ್ನು ಸಾಧಿಸಿ ಸಂಸ್ಕರಿಸಿ.

Setting New Standards in Treated Water Use for Asia

- **1450 MLD of Wastewater Treated Daily** - State-of-the-art treatment facilities reclaim water for the city's essential uses.
 - **Pioneering Recycling Practices** - Achieving 90% recycling of treated water, establishing a benchmark for sustainability.
 - **Building Construction Goes Green** - Mandating treated water for construction projects, embedding sustainability at every step.
 - **Advanced, Zero-Bacteria Water Treatment** - In collaboration with IISc, introducing indigenous technology that ensures safe, clean water.
- BWSSB's visionary approach has positioned Bengaluru as a national model for sustainable, effective water management—securing the city's water future and setting an example for the entire continent.



ABOUT THE COLLEGE

St. Francis College Bengaluru is a minority Christian College, affiliated to Bengaluru City University (BCU). It is located in the bustling neighbourhood of Koramangala, right in the centre of Bengaluru. The ideals of moral rectitude, social responsibility, and the quest for excellence are fostered and overseen by the Franciscan Brothers. The college not only aims for the academic success but it also aims for the holistic development of its students.

ABOUT THE MANAGEMENT

In 1901, Rev. Bro. Paulus Moritz from Germany established the Congregation of the Franciscan Missionary Brothers in India. Since, then the Congregation has dedicated itself to serving humanity through a multitude of educational institutions, colleges, orphanages, and technical institutes spread across several states. Apart from these establishments, the Franciscan Congregation has its branches in the USA, Germany and Switzerland.

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CSD annual publication, 2024

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