



Shri Ram College of Commerce

University of Delhi

AVNI

2022-23



CENTRE FOR GREEN INITIATIVES



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AVNI

Avni

/ av'nee /

(noun)

"The earth ,the planet on which we live in."

Avni: The vast, bountiful, and caring Mother Earth who embraces and nourishes us all.

The Endless Love for Mother Earth and her gift for the beings who dwell on her can only be exemplified by the quote, "You will find something more in woods than in books. Trees and stones will teach you that, which you can never learn from masters."

- St. Barnard

Avni's 5th edition hopes to enlighten the reader and bring forth in them the willingness to protect and preserve Mother Earth. Avni depicts the thoughts and emotions of the students and intellectuals, as well as their devotion towards the planet.

The magazine sheds light on the activities conducted by CGI towards its goal of reinvigorating the spirit to protect nature, along with multiple articles to exemplify some challenges faced by the world and some steps taken to resolve the wrath of nature.

PRINCIPAL'S MESSAGE



"The only way forward, if we are going to improve the quality of the environment, is to get everybody involved"

– Richard Rogers

It's a matter of great pleasure that the Centre for Green Initiatives has released yet another edition of its annual magazine 'Avni'.

The initiative will contribute towards establishing greater awareness regarding a greener environment.

We are part of a larger environment and we need to take its utmost care for our own well-being and the well-being of all other creatures on this planet. CGI is consistently working in this direction by addressing various environmental concerns, spreading awareness, and looking towards more sustainable and conscious decisions and actions.

The annual publication of this magazine gives strength to the cell's vision and mobilizes the efforts of various stakeholders towards building a better planet.

I acknowledge their efforts and congratulate the entire CGI team for the successful completion of the magazine.

Prof. Simirit Kaur
(Principal)

CONVENOR'S MESSAGE



‘Environment is no one’s property to destroy; it’s everyone’s responsibility to protect’

– Mohith Agadi

It fills my heart with immense pleasure to announce that the Centre for Green Initiatives is back with the latest edition of its annual magazine ‘Avni’. As the world continues to battle the menace of an unprecedented pandemic, the need for following environmental ethics has become more important than ever. The Centre for Green Initiatives, through its activities, aims at encompassing a sense of responsibility towards the environment as a component of holistic growth of the students. This magazine aims to kindle the imagination of our students, bringing out the latent talent in them. This magazine puts forth the perfect amalgamation of creativity, research and environmental concerns, which I hope will help the readers develop empathy towards the environment.

I am glad to see that CGI is able to create a real difference through the voices presented in ‘Avni’. I congratulate the entire CGI team on the publication of this magazine and look forward to taking CGI to new heights in the coming years!

Prof. Rachna Java
(Convenor)



ABOUT CGI

CENTRE FOR GREEN INITIATIVES

As a proactive institution concerned with the conservation of the environment, the Centre for Green Initiatives was established in the College to generate awareness and promote environmental care at both the individual and community levels. The Centre aims to create a pervasive atmosphere by facilitating conversation, action, and feedback on environmental issues by engaging faculty, students, and the general public.

Our Functions

- Undertaking extensive research and surveys on various environmental-related issues prevalent in society and understanding their causes, possible impacts, and remedial measures
- Conducting seminars, workshops, and campaigns to sensitize people about environmental issues pertaining to society.
- Tapping the CSR initiatives of corporations, social venture funds, and other potential platforms for funding
- Initiating and facilitating collaboration with various organizations working extensively in various fields such as waste management, water conservation, energy practices, etc.
- Setting up the latest technology meant for maximizing environmental impact

Our Objectives

- Understanding various environmental issues and the need to address them
- Sensitizing people about the need for the protection of the environment for a sustainable and healthy future
- Undertaking technological setup aimed at an environmentally and economically strong impact

Our Initiatives

Our Projects

- Solid Waste Management
- Energy Conservation (solar panels)
- Water Conservation

Collaborations

- NGO's
- Government Institutions
- Corporates (CSR)



Other Works

- Making our campus disabled friendly
- Botanical and herbal gardens

Encouraging Green Practices

- Encouraging activities like carpooling and cycling
- Holding Workshops and Sessions



TATVA

Annual Fest of CGI

TATVA

The Centre for Green Initiatives celebrated 'TATVA', its annual green festival, on April 22 and 23, 2022. The event is the epitome of spreading green awareness and promoting the idea of sustainability across the world. The festival, wishing to ignite the passion of people for nature and its unimaginable beauty, held multiple events.

"Quizzera: A Quiz Competition" was an environmental quiz competition where the participants' knowledge and love for the environment would be tested.

Following this, TATVA had **"Tarang:** The Poster Making Competition", which aimed to channel people's creativity on paper and generate awareness on various issues.

R3 was another event where participants had to recycle their waste materials and form something new of value, promoting the three R's.

We were joined by eminent speakers **Mr Satyam Jha, Mr Akhilesh Anil, Mr Zeeshan Khan, Mr Ramesh Sharma,** and **Mr Rajiv Khurana;** they raised our eyes to various environmental issues, making everyone feel the need and urge to protect mother nature.

TATVA was an overwhelming success and helped bud many new, younger environmentalists across the nation.





OUR INITIATIVES



GREEN RIDE INITIATIVE

Believing in the idea that an eco-friendly and pollution-free means of commuting, is one of the primary steps that one can take to reduce pollution The Centre for Green Initiatives, in collaboration with Green Ride Pvt. Ltd., launched the Green Ride Public Bicycle Sharing Service, a project funded by the Tech Mahindra Foundation and in collaboration with DPCL.

Under this service, a well-designed modern bicycle stand has been constructed on the college campus, housing twenty bicycles provided by Green Ride Pvt. Ltd., free of charge for students and staff members. Enhancing the environmental responsibility profile of the college, the service was inaugurated by

**Mr. Ajay S. Shriram , Chairman ,SRCC
on February 7 , 2019 .**

The inauguration organised by the Centre for Green Initiatives, who have spearheaded this project, consisted of a ribbon cutting ceremony and sweet distribution amongst the faculty, staff members, students, and representatives from DMRC and DCPL present.

This drive was started by the Centre for Green Initiatives to promote the use of bicycles on campus, in light of the problem of traffic jams and pollution in Delhi. This works on a four-step approach:

Step 1: Download the app and register.

Step 2: Unlock the device and scan the QR code.

Step 3: After it is unlocked, you can take the bike and enjoy your ride.

Step 4: Lastly, the cycle is to be returned at the prescribed locations. Wait until the beep to ensure you are deregistered.

SOLAR POWER PROJECT

As a proactive institution committed to environmental protection by reducing carbon footprint through the generation of clean and renewable energy, the Centre for Green Initiatives, SRCC, launched a first-of-its-kind initiative, the "SOLAR POWER PROJECT", for generating electricity using solar panels in the college.

The initiative is under a 25-year agreement with Tata Power Renewable Ltd. (TPREL) and is fully funded by Tata Power Delhi Distribution Ltd. (TPDDL) for generating electricity on the college premises.

The project commenced in October 2019 and was completed in March 2020. The present project has a generation capacity of 425 kWp and caters to about 45 percent of the college's net energy requirements, which has reduced the college's carbon footprint by 533.4 tonnes.



Over 1310 solar panels were installed, which is one of the largest installed solar power plants across the colleges of the University of Delhi.

The planning and execution of the project required close coordination between the college and the agencies responsible for the implementation of the project.

A faculty member representative from the Centre for Green Initiatives, SRCC, was appointed as the project liaison officer for the solar project. Non-teaching members of SRCC from the Administrative and Accounts Office facilitated the administrative and financial formalities required for the completion of the project.

SOLID WASTE MANAGEMENT

In a bid to create a healthy and eco-friendly environment, The Centre for Green Initiatives, SRCC has taken up various projects relating to solid waste management. Solid waste management is the proper collection, treatment, and disposal of solid waste, along with the regulation of the waste management process.

Solid waste is a major hazard in today's world, and the world produces over two billion metric tonnes of solid waste each year, much of which goes untreated, with India alone generating nearly 3.5 million metric tonnes of plastic waste every year, making it one of the biggest plastic polluting countries globally.



The Centre for Green Initiatives has taken numerous steps to ensure that the waste generated from our college, Shri Ram College of Commerce, is disposed of in the proper manner. All the paper from the college is properly collected and sold to a waste entrepreneurial NGO named 'Greenobin'. Further, the college has separate bins for the collection of waste, and the collected waste is segregated into biodegradable and non-biodegradable waste at the source itself.

These initiatives taken by the Centre for Green Initiatives are a small step in the right direction and an inspiration to others in the country and around the world to start taking this solid waste management crisis seriously before it is too late.





WATER CONSERVATION

Water management is the process of planning, developing, and distributing water in a way that ensures its optimum usage and minimises wastage. Whereas water conservation is the process of using water efficiently so as to reduce unnecessary water usage.

Water is a basic need that everyone has for survival, and it threatens not only our lives but also our livelihoods. Water scarcity is a glaring problem that affects nearly 600 million people each year in India alone, and this needs to be addressed at the earliest possible time.

The Centre for Green Initiatives has undertaken various steps to curb this menace. Our college set up a rainwater harvesting system within the college premises. The water collected through this method helps replenish the groundwater table, with it providing over fifteen million litres of water every year.

Apart from this, the borewell water available undergoes RO cleaning before being used in the college. The water that is unfit for drinking is used in the college washrooms, thereby preventing the wastage of any water and thereby establishing a zero-waste model.



INITIATIVES: Session 2022-23

GREEN DIWALI

On the auspicious occasion of the festival of lights coming up, the Centre for Green Initiative celebrated "Green Diwali" on October 20, 2022.

The venue for the celebrations was the college campus co-op area, which was beautifully setup for the event.

The event to celebrate green Diwali officially started at 1 p.m. with the recreational activity of making a green rangoli. Alongside this, in order to reinvigorate a sense of tradition and to celebrate the occasion, CGI had set up stalls that allowed the participants to colour their own divas, which they then took home to celebrate the event with their families.

Following its traditional roots of spreading awareness regarding the environment, CGI also had a stall that hosted an environmental quiz where participants could answer questions that showed their love for the environment and allowed them to win exclusive prizes. There were a huge number of participants who joined CGI in celebrating this occasion. CGI also performed a jam session to bring the activities to the notice and attention of the students, engaging them in the experience.

Principal Ma'am Joined us to celebrate the enticing event at 2 p.m., and ma'am clicked pictures with the entire CGI body next to the green Diwali's Rangoli, and following this Panache - the Western Dance Society, SRCC performed live shows, rejuvenating the entire student body and getting all the participants to gleefully dance on this occasion, finally marking the end of the celebration and filling us all with excitement for the coming of the Diwali.



MASK DRIVE



CGI, SRCC, in collaboration with the Lung Care Foundation conducted a mask distribution drive on May 5, 2022. The aim of the drive was to spread awareness regarding COVID-19 and to prevent the curbing of the second wave of COVID-19.

In order to promote mask wearing, CGI distributed over 200 masks around the college campus. The primary target group to receive the masks were EWS people. This was a one-day drive with over a dozen participants distributing the masks to allow people to better protect themselves as well as their families by making them take more precautionary measures to safeguard against COVID-19.

PANERAI OCEAN CONSERVATION SEMINAR

The CGI SRCC organised and led a workshop on a global educational campaign about sustainability in the luxury industry and the significance of the ocean on Monday, September 5, 2022 in partnership with Panerai Watches. Mr. Mohit Hemdev, Country Manager of Panerai India, received a gesture of honour from Mr. Sudhanshu Yadav before the session got underway at 11:30 a.m.

More than 70 students attended the offline event where Mr. Hemdev presented how Panerai is actively involved in environmental and ocean protection. In-depth information about Panerai's environmental practices was provided in the presentation. They presented instances of how the organization employed recycled metals in their timepieces and solar panels on the roofs of their offices. Rainwater collection tanks and 100% green hydroelectric power are part of Panerai's sustainability initiative, which focuses on water conservation throughout manufacturing operations. By creating a wristband for their watches out of 3 plastic bottles, they demonstrated their role in plastic recycling. By 2023, Panerai aims to employ 97% recyclable materials and 100% recycled packaging.

The Luxury company Panerai recognises the value of sustainability. After the presentation, students and Mr. Hemdev engaged in a cross-examination about the company's objectives, accessibility, and the necessity of ocean preservation. At the conclusion, there was a quiz



where 10 questions about the presentation were posed to the audience. The session came to a close after photos were taken with Mr. Mohit Hemdev and the CGI SRCC team



INITIA

2022-

We learned that economic growth and environmental
Christopher

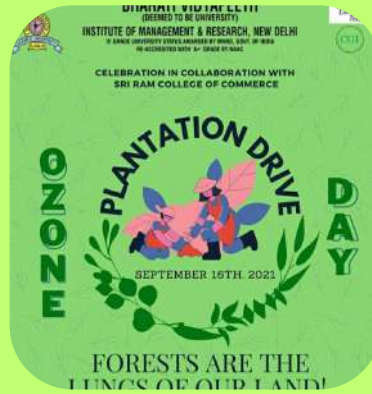


INITIATIVES -2023



21

environmental protection can and should go hand in hand
Dodd

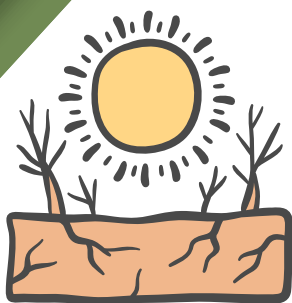




ARTICLES

By- SRCC Students





UN CONVENTION ON COMBATING DESERTIFICATION

Desertification is the process by which fertile land becomes desert due to human and climatic factors, resulting in the degradation of arid and semi-arid regions. This problem has serious implications for human life and the ecological balance of the region, affecting about 40% of the world's land area and 2 billion people. The United Nations Convention to Combat Desertification (UNCCD) was adopted to reduce and reverse land degradation, particularly in arid, semi-arid and sub-humid regions. The UNCCD has four main programs that, when met, are the reason for Sustainable Development Goal 15.

The first program of the UNCCD is Land Degradation Neutrality (LDN), which requires member states to take four key actions to halt land degradation by 2030. The second program is the Drought Initiative, which establishes drought preparedness systems in many countries to reduce vulnerability to drought and help people and ecosystems adapt to drought.

The third program is the Great Green Wall Initiative, which aims to cover a stretch of 8,000 km across Africa with trees to restore degraded and spreading deserts in the Sahel. The fourth program is the Capacity Building Marketplace, which identifies research priorities and recommends ways to strengthen collaboration among researchers while reviewing relevant data.

The UNCCD has played an important role in mitigating desertification, restoring some 600,000 square kilometers of land since its convention. It has worked hard to raise awareness of desertification, counter its spread, and restore land to make it habitable for human settlements in the future. The LDN Initiative has received commitments from 128 of the 196 signatory countries to halt land degradation by 2030. The Drought Initiative has formulated a

comprehensive drought action plan in more than 60 countries around the world. The Great Green Wall Initiative has raised \$8 billion to restore degraded land, provide economic opportunities for young Africans, ensure food security for millions, and increase climate resilience on the African continent. The Capacity Building Marketplace identifies research priorities and recommends ways to strengthen collaboration among researchers while reviewing relevant data.

In summary, desertification is a serious problem worldwide, with far-reaching impacts on both human lives and the ecological balance in the region. The UNCCD has been working to reduce and reverse land degradation through its four main programs, which, if met, will be the reason for Sustainable Development Goal 15.



The LDN, the Drought Initiative, the Great Green Wall Initiative, and the Capacity Building Marketplace have been instrumental in curbing desertification, restoring land, and raising awareness of the problem.

- Abhijit Singh

For detailed article visit-
https://www.linkedin.com/posts/centreofgreeninitiatives_cgi-srcc-gogreen-activity-7051643053480026112-rUom/?utm_source=share&utm_medium=member_ios

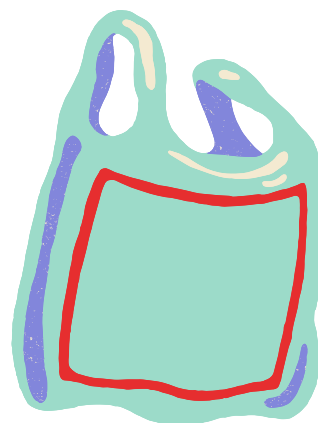
PLASTIC IN OCEANS

Every year, more than 8 million tons of plastic waste ends up in our oceans, where it harms marine life such as whales, turtles and dolphins. This is because half of the 300 million tons of plastic we produce each year is used only once and then thrown away. The plastic waste eventually breaks down in the ocean into tiny particles that attract toxins and cause diseases in humans that are passed down the food chain.

Scientists refer to these statistics as the "wow factor" of marine debris, but beyond the shock value, they are trying to understand where marine debris is and how it affects different ecosystems. Scientists also need to know how plastic degrades, whether plastic toxins are entering the marine environment, and in what quantities.

While scientists know a lot about the damage that large pieces of plastic cause to marine life, the potential harm from microplastics is less clear.

Researchers count trash in the ocean in three ways: through beach surveys, computer models based on samples collected at sea, and estimates of the amount of trash entering the oceans. The latest counts use computer models based on samples collected at sea. Collecting and counting is meticulous and time-consuming work. Plastic in the ocean collects in the five major eddies, large systems of spiraling currents, and as the plastic breaks down into fragments, it falls into deeper water where it is carried by currents to remote parts of the world.



For detailed article visit-
www.linkedin.com/posts/centreofgreeninitiatives_srcc-environment-saynotoplastic-activity-7051641651240312832-qeV9/?utm_source=share&utm_medium=member_ios

Estimates of the amount of plastic in the ocean range from 5.25 trillion pieces floating on the surface to four billion plastic microfibers per square kilometer littering the deep sea. The numbers help clarify some questions, but scientists still need to learn more about the amount of plastic in remote regions of the Southern Hemisphere, the density of plastic accumulation in different marine ecosystems, and how the plastic degrades.

-Mahatv Bajaj



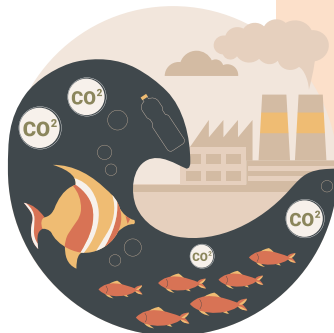
OCEAN ACIDIFICATION

Ocean acidification is a process that causes the pH of the ocean to decrease as it absorbs more carbon dioxide (CO₂) from the atmosphere. This phenomenon has been identified as a potential problem by scientists who have been studying the effects of rising atmospheric CO₂ on the world's oceans since the late 1980s and early 1990s. Rising CO₂ emissions could lead to significant changes in ocean chemistry that could adversely affect marine life.

The ocean has served as a "carbon sink" for thousands of years, absorbing and releasing CO₂. However, increases in atmospheric CO₂ levels caused by industrialization and other human activities such as deforestation have impaired this exchange. The pH of the ocean has decreased over the last century, making marine life extremely vulnerable. The growth of calcifying marine animals such as oysters, corals, lobsters and clams is hindered by the increase in acidity, which can affect the food chain.

More than 3 billion people in the world rely on seafood to meet their protein needs, and ocean acidification impacts their livelihoods and economies. Ocean acidification not only affects the availability of seafood, but also alters the quantity and chemical composition of toxic algal blooms, which can accumulate toxins that harm humans.

There are things that can be done about ocean acidification, such as reducing carbon dioxide emissions, protecting marine habitats, promoting ethical fishing practices, and supporting monitoring and research. The most effective strategy to combat ocean acidification is to reduce carbon dioxide emissions to the atmosphere. Protecting marine habitats and promoting ethical fishing practices can help reduce the impacts of ocean acidification.





In summary, ocean acidification is an evolving problem caused by an increase in carbon dioxide (CO₂) in the atmosphere. This phenomenon is a threat to marine life and has a significant impact on living and economic conditions around the world. However, there are effective strategies to address ocean acidification, such as reducing carbon emissions, protecting marine ecosystems, promoting ethical fishing practices, and supporting monitoring and research. The importance of early action to minimize the impacts of ocean acidification and ensure the health and resilience of the world's oceans for future generations cannot be overstated.

--Ankita Dung Dung

For detailed article visit-

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ASSOCIATING EXECUTIVE REMUNERATION WITH SUSTAINABLE AMBITIONS IN A CORPORATE AMBIT

Corporate sustainability has become a critical aspect of businesses worldwide, but executive compensation is not aligned with the long-term financial and non-financial aspirations of organizations. This discrepancy can be turned into a driver of change if it is brought into alignment. Research has shown that companies with long-term incentive plans for their executives tend to invest in innovation, cultivate relationships with their stakeholders, and engage in more "long-term oriented" behavior. The shift to a sustainable economy may present challenges, but it is inevitable, and companies must take proactive steps to develop sustainable compensation programs.

To develop a sustainable compensation plan, companies need to align their goals with their strategy, incorporate relevant ESG metrics, and determine the weighting of incentive system metrics. Incentives for board members and senior executives should be contingent on the achievement of sustainable financial criteria.



Compensation plans should be linked to clear, measurable KPIs and have financial significance for participants, with non-traditional metrics forming a significant part of the targets. KPIs must be measurable and based on external standards or international treaties, such as the Paris Agreement.

Once the KPIs are identified, it is important to set performance targets for each of them. The targets should use comparative targets that allow for comparison between different sectors. To evaluate the internal efficiency of GHG emissions, link the measure to sales or production levels. Executive compensation linked to performance targets should be



verifiable and follow established disclosure standards, such as the Global Reporting Initiative for emissions.

To drive the transition to a sustainable and regenerative economy, boards and executives need to link their sustainability goals to executive compensation and governance frameworks. Answering the five questions above can serve as a starting point for creating a sustainable compensation framework that encourages positive behavior. Companies like Santander and Tesco have incorporated sustainable metrics into their compensation plans, which has a significant impact on decision making. By aligning executive compensation with long-term financial and non-financial goals, companies can create a driver for change and accelerate the transition to a sustainable economy.

-Om Marwah

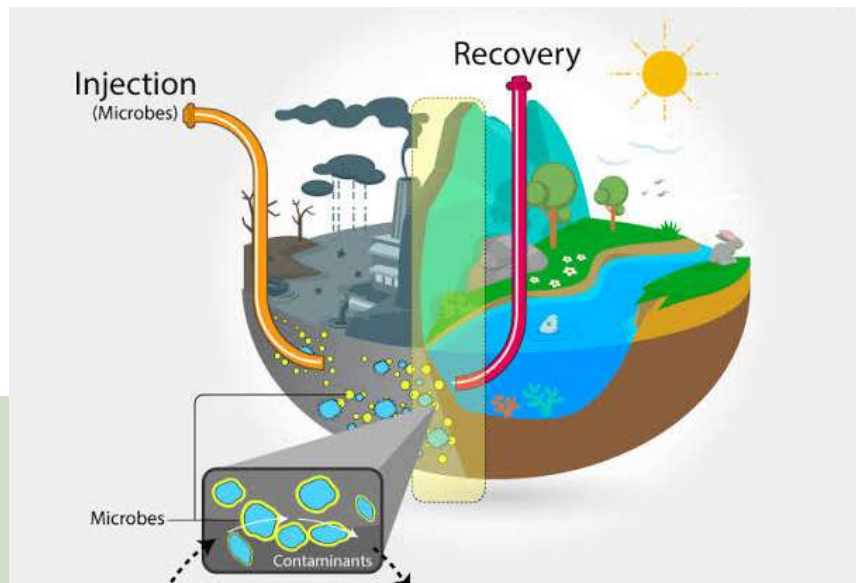
For detailed article visit-
https://www.linkedin.com/posts/centreofgreeninitiatives_todays-topic-associative-executive-remuneration-activity-7051647366549970945-8oyR/?utm_source=share&utm_medium=member_ios

BIOREMEDIATION: WASTE MANAGEMENT TECHNIQUE



Bioremediation is a branch of biotechnology that uses microorganisms to break down and remove hazardous substances from contaminated environments. In this process, waste is recycled and converted into productive substances that can be reused by other organisms. The process can help clean up contaminated sites such as oil spills, chemical waste sites, and soil contaminated with heavy metals. Although bioremediation cannot completely remove hazardous elements, it detoxifies harmful substances without the use of toxic chemicals, extensive equipment or labor. Wastewater treatment plants in the United States are the largest bioremediation company in the world.

However, the method is limited to biodegradable compounds only and takes longer than other treatment options.



he results of biodegradation can also be more toxic than the original compound. Nevertheless, with further research, bioremediation may be the fastest and most sustainable way to clean up the planet.

In India, bioremediation is being used in projects such as the Legacy Waste Bioremediation Plant in Ludhiana, which is expected to cost 27.17 million euros, and in the cleaning of 20 targeted lakes in Hyderabad, which is expected to cost 400 million euros. To overcome the imbalance in growth between economic development and environmental protection, there is an urgent need to initiate projects such as "Swachh Vtavar" and involve educational institutions in the implementation of large-scale demonstration projects. The Indian Ministry of Environment, Forests and Climate Change should plan to introduce bioremediation from laboratory to pilot to field scale, initially in the most polluted states such as Maharashtra and Delhi, to link economic growth with sustainable development.

For detailed article visit-

https://www.linkedin.com/posts/centr eofgreeninitiatives_cgi-srcc-activity-7051643700581478400-v2n1/?utm_source=share&utm_medium=member_ios

-Payal Yadav



MEET OUR TEAM



Chairperson

Prof. Simrit Kaur
(Principal)



Convenor

Prof. Rachna Jawa
(Professor)



Faculty Members

Dr. Gaurav Sharma, Dr. Priyanka Aggarwal,
Mr. Sudhanshu Yadav, Mr. Harvinder Singh



Cabinet Members

Stuti (President), Logesh, Shravani and Abhishek (Chief Coordinators),
Khushi (Technical Head), Pranathi (Organising and Marketing Head),
Kasturi (Research and Editorial Head)



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