SHRI RAM COLLEGE OF COMMERCE

Centre for Green Initiatives

presents

2025 अवनि

THE ANNUAL SUSTAINABILITY MAGAZINE
CGI, SRCC

9th Edition, 2025

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ABOUT 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 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 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

ABOUT AVNI

Avni /av'nee/ (noun) — The Earth; the planet on which we live.

Avni is a tribute to Mother Earth—nurturing, abundant, and resilient. Just as the Earth sustains life, this magazine seeks to cultivate awareness, action, and appreciation for the environment. In the words of Khalil Gibran, "Forget not that the earth delights to feel your bare feet and the winds long to play with your hair."

This edition of Avni brings together insightful articles, thought-provoking interviews, and reports on impactful initiatives, all reflecting the spirit of sustainability and environmental action at Shri Ram College of Commerce. From the Principal's and Convenor's messages to CGI's ongoing projects, Avni highlights the collective efforts that drive meaningful change.

With sections covering CGI's initiatives, student perspectives, collaborations, and key environmental discussions, Avni is more than just a magazine—it is a platform for dialogue and inspiration. It is a reflection of our shared commitment to a greener, more sustainable future.

As you turn these pages, we hope you find knowledge, inspiration, and the motivation to be a part of this journey. Let's work together to protect and preserve the planet we call home.

MESSAGE FROM PRINCIPAL

AVNI 2025

Prof. Simrit Kaur
PRINCIPAL, SRCC

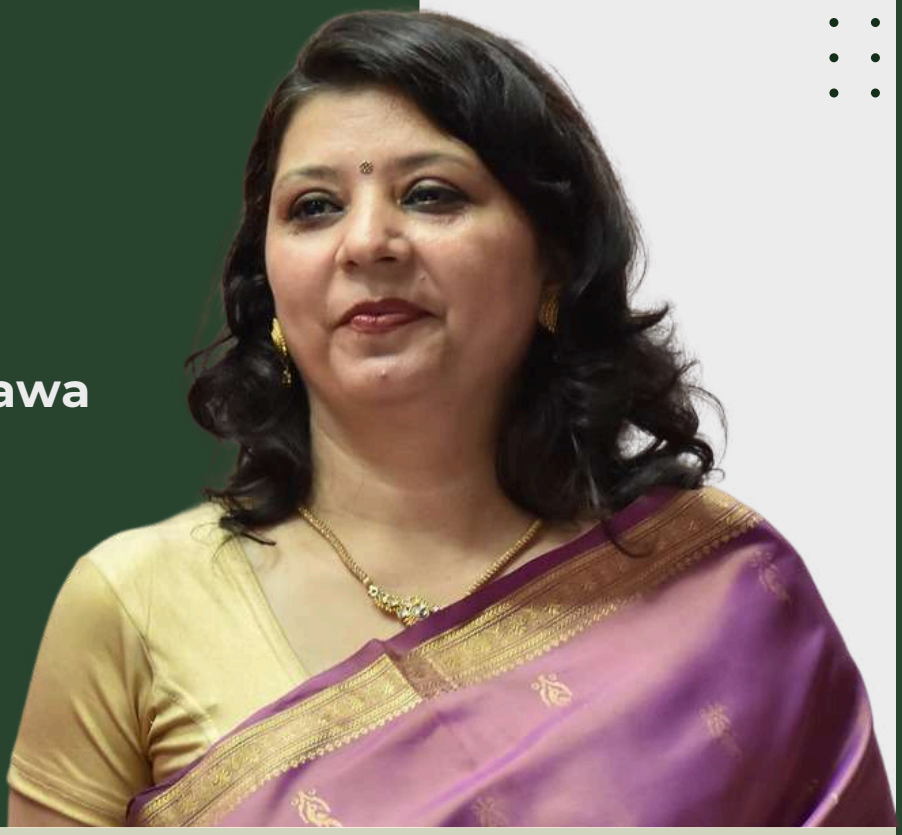
"The environment is where we all meet; where we all have a mutual interest; it is the one thing all of us share." – Lady Bird Johnson

It gives me immense pride to present the 9th edition of Avni, the annual magazine of the Centre for Green Initiatives. Over the years, Avni has grown into a vibrant platform that reflects the deep-rooted commitment of our students and faculty towards building a sustainable future.

The initiatives highlighted in this edition range from renewable energy, solid waste management, collaborative campaigns on e-waste to water conservation. These are amongst some of the exemplary steps toward our shared vision of sustainability. I commend the CGI team for their efforts and dedication, and hope this magazine continues to inspire everyone to contribute meaningfully to the planet we all share.

MESSAGE FROM CONVENOR

AVNI 2025



Prof. Rachna Jawa
CONVENOR, CGI

It is with great joy and pride that I introduce the 9th edition of Avni, a celebration of purpose-driven action and environmental thoughtfulness. This magazine reflects the tireless efforts of the CGI team to create a cleaner, greener world—both within and beyond the campus.

This year's collaborations with JIT Inc., Project Green and Garbage, and the Sant Nirankari Charitable Foundation have enabled us to broaden our impact and raise awareness in meaningful ways. Whether it's responsible waste disposal, green festivals, or restoring our rivers, CGI has led with conviction and compassion.

I extend my heartfelt appreciation to the team and hope Avni continues to inspire action rooted in optimism and care for the environment.

Together, let us nurture a culture where sustainability becomes not just a goal, but a way of life.

OUR INITIATIVES

At the Centre for Green Initiatives (CGI), our commitment to environmental stewardship is driven by the belief that small, consistent actions can lead to meaningful change. Over the past years, we have actively undertaken diverse sustainability initiatives that not only address pressing environmental concerns but also inspire a culture of conscious living within our campus and beyond. Our projects are rooted in innovation, collaboration, and impact. Here are some of the key initiatives we proudly champion:

SOLAR POWER PROJECT

In our pursuit of renewable energy solutions, we implemented a landmark Solar Power Project in collaboration with Tata Power Renewable Ltd., fully funded by Tata Power Delhi Distribution Ltd. With 1310+ solar panels and a 425 kWp capacity, this project now meets nearly 45% of SRCC's energy requirements, reducing our carbon footprint by over 530 tonnes annually. It stands as one of the largest solar installations in Delhi University colleges, symbolizing our transition to a greener future.

SOLID WASTE MANAGEMENT

With the growing global challenge of waste, CGI has taken proactive steps to ensure proper disposal and segregation. Partnering with the entrepreneurial NGO Greenobin, we collect and recycle all paper waste. Dedicated biodegradable and non-biodegradable bins have been installed across campus, emphasizing source-level segregation. These practices reflect our belief in a zero-waste model and serve as a replicable model for others.

RAINWATER CONSERVATION

Acknowledging India's looming water crisis, CGI has spearheaded efforts in water conservation through the installation of rainwater harvesting systems that recharge over 15 million litres of groundwater annually. Additionally, we utilize borewell water efficiently by integrating RO cleaning systems and redirecting unusable water for sanitation purposes, thereby aligning our practices with zero-waste principles.

GREENRIDE BICYCLE SHARING SERVICE

To tackle vehicular pollution and promote eco-friendly mobility, CGI, in association with Green Ride Pvt. Ltd., introduced a Public Bicycle Sharing System on campus. Supported by Tech Mahindra Foundation and DPCL, this initiative provides free bicycles for students and staff, encouraging sustainable and healthy commuting practices within the SRCC community.

We are the Pioneers.

CGI continues to foster a culture of environmental responsibility through diverse awareness initiatives. Our **Green Diwal**i, in collaboration with **Project Green and Garbage**, blended celebration with sustainability. The **e-Waste Awareness Campaign** with **JIT Inc.** sensitized students to responsible electronic disposal. The **Tulsi Plantation Drive** promoted ecological healing through the planting of sacred basil. Additionally, the **Yamuna Cleanliness and Awareness Drive**, held in partnership with the **Sant Nirankari Foundation**, mobilized volunteers to restore the riverfront and spread awareness on water conservation. Together, these initiatives reflect CGI's hands-on approach to sustainability and collective action.

VOICES OF CHANGE

Perspectives by Students

In these pages, thoughts find their rhythm and ideas take flight.
Through articles and poems, our students explore the many dimensions of sustainability—questioning, reflecting, and reimagining a greener world.
Each piece is a spark: a bold idea, a heartfelt concern, a vision for change. Together, they remind us that words, when fueled by purpose, can move hearts, shift perspectives, and inspire action toward a better tomorrow.

The Rise of Thrifting Culture

A Sustainable Shift in Consumer Mindset

“The fashion industry is responsible for producing 92 million tons of clothing waste each year. As landfills overflow with last season’s trends, a quiet revolution is unfolding — one thrifted piece at a time.”
Thrifting is the practice of buying used or pre-owned items, particularly clothing and accessories, often from thrift stores or other outlets that sell secondhand goods. It's a way to extend the life of existing items, reduce waste, and embrace a more sustainable fashion approach. Thrifting is trending, especially among youth, due to a mix of several factors, including the desire for affordable and unique fashion, an increasing awareness of sustainability and environmental responsibility and a shift in attitudes towards consumption from purchasing new items to trying out second hand goods. It offers a way to find high-quality, often designer, items at lower prices, while also bringing down the textile waste and promoting a more conscious approach to shopping. All in all, thrifting is gaining popularity due to its economic, environmental and cultural appeal, marking a shift in how we consume fashion.

The environmental angle

Buying brand new items might seem a very attractive option but if we consider the impact our purchase has on environment, thrifting is definitely the way-to-go. Here are some of the reasons why you might want to switch to thrifting:

- **Less resource consumption:** Today’s world of fast fashion consumes a lot of resources in the creation of anything. Some of the natural resources, that we have been bestowed upon by the nature, are being used at a rate that is faster than their rate of regeneration. When we thrift, we are rejecting the demand of new goods and hence, the resources used in their production are conserved. If we talk specifically about clothing and textiles, less fabric is wasted and the water footprint of an item becomes less since the life of the item is extended.

- **Fewer things are thrown away:** When we thrift, it is not the consumption of resources that is abated but also the waste that is generated, upon throwing of used goods and by products of production, is decreased. In today's world where people believe in impulsive purchasing and retail therapy, shopping second hand goods is a great way to consume the things which are already in the environment and are still in a usable form. Donating particulars rather than discarding them and looking for a alternate item next time we need something, is really a considerable option.
- **Less chemical pollution:** It takes a great deal of manufacturing and processing to be able to produce new things. Be it clothing, natural or synthetic, or any other good made of natural resources like tin, aluminum, etc. a lot of chemicals are used for the production of anything, right from the growth stage to extraction to its processing. These chemicals contaminate the water bodies and soil, which ultimately finds its way to our bodies. By denying to buy new goods, we contribute towards the decline in use of these chemicals. Not only this, the negative impact on health can also be reduced.

Is there an economic angle?

Thrifting is something that our environment loves a lot. But our wallet is something that will love thrifting all the more. Let's look at the how thrifting is pocket friendly.

1. Save money: Obviously, the goods once used will be cheaper than the ones you purchase from stores with tags. Thrifting allows people to buy more in less. Buying staple pieces at the thrift store which can build around several outfits is a good option.
2. Give back to the community: The money we contribute to a thrift store uplifts the community it comes from. Certain thrift stores send profits to homeless shelters, animal rescues or towards other causes. It is a great way to contribute to the society if there's a cause you particularly relate to.
3. Invest in lasting clothes: thrift stores generally have items which have lasted the wear and tear of a generation already. Sustainable particulars tend to cost a bit more while they can be set up for potentially much cheaper than new in a thrift store. The more sustainable items you buy from a thrift store, the less constantly you will need to buy.

Market Size and Growth:

The Indian second-hand apparel market is currently valued at $3 billion and is expected to reach $9.1 billion by 2032, representing a CAGR of 13.04%. This growth is fueled by increased awareness through social media and a growing preference for sustainable consumption, particularly among millennials and Gen Z.

Major cities like Delhi, Mumbai, and Bengaluru dominate the thrifting scene, but the trend is spreading to other tier 1 and 2 cities.
Key trends:

1. **Online thrifting:** Social media platforms like Instagram have become a major hub for thrift stores, offering convenience and a wider reach.
2. **Sustainability:** Thrifting aligns with growing environmental consciousness, as it reduces waste and promotes a circular economy.
3. **Gen Z and Millennials:** Younger generations are driving the thrifting trend, motivated by factors like budget shopping, unique style and sustainable fashion.
4. **Role of technology:** AI-powered thrift platforms and increased participation from fashion influencers and brands are anticipated to further propel the rise in thrift.

Overall, thrifting in India is a burgeoning market with significant potential for growth, driven by sustainability concerns, social media trends and the preferences of younger consumers.

Shriya Singhal
SRCC

AI and the Environment

The High-Tech Tightrope We Walk

We exist in a world where technology that can aid in monitoring endangered elephants may actually be speeding up climate change. Artificial intelligence has emerged as environment's unexpected friend —and secret enemy. As AI powers groundbreaking innovations in conservation and renewable energy, its own ecological impact presents a more complex narrative.

The statistics don't lie. A system of artificial intelligence can conserve millions of gallons of water for farmers , while at the same time using enough energy to fuel a small town. It can save rainforests in one breath and add to e-waste mountains in the next. This paradox characterizes our digital age: we have made tools capable of saving the world, but only if we first figure out ways they may destroy it in.

The Bright Side: AI as an Environmental Game-Changer

AI is proving to be worth its weight in gold on various environmental fronts. From wildlife conservation to intelligent agriculture and clean energy maximization, these systems are assisting in finding solutions to some of our most critical ecological problems.

Conservationists now employ AI to identify poachers in real time, farmers use smart sensors to significantly cut down water waste, and even the shift towards renewable energy is being spurred by AI's capability to forecast wind and solar patterns with precision.

The Hidden Costs: AI's Increasing Environmental Debt

The infrastructure that supports such solutions has incredible environmental costs. Energy needs for training cutting-edge AI models already equal the consumption of small countries' electricity supplies. Data centres need billions of litres of water for their cooling systems, putting a strain on local resources. Most worrying is the mounting pile of electronic waste from AI hardwares that will become obsolete every few years. These effects risk rendering AI's environmental gains null , if unaddressed.

Walking the Tightrope: Solutions to Sustainable AI

Three essential avenues can balance the potential of AI with planetary limits. We first must rethink AI systems on the basis of efficiency instead of sheer power. Second, governments need to set rigorous sustainability criteria for AI design. Third, the technology sector needs to adopt circular economy practices for AI hardware. A few firms are going this way, but the progress is uneven across the industry.

Conclusion: The Choice Before Us

AI presents one of the most complex environmental dilemmas of our time—a technology that could either help rescue ecosystems or further strain them. The difference will come down to deliberate choices about how we develop and deploy these powerful tools. In the race to create smarter AI, we can't afford to be short-sighted about its environmental impacts. The future is for those who get that saving the planet and developing technology should be one
and the same project.

Mahi Chopra
SRCC

Can Your Jeans Tell Their Life Story?

Imagine picking up a pair of jeans and instantly knowing where the cotton was farmed, how much water it took to produce and whether the factory workers were paid fairly. Sounds like science fiction?
Well, not for long.
In the EU, it's becoming the law. And if history's any indication, what starts in Brussels rarely stays in Brussels.

WHAT IS THE DPP?

The Digital Product Passport is envisioned as a standardized digital record of a product's lifecycle. From design to disassembly, it will contain essential data about raw materials, environmental footprint, durability, recyclability and more.
Here's the twist: it won't just apply to EU-made goods. Whether a product is assembled in Stuttgart or Shenzhen, if it's sold in the EU, it falls under DPP regulation.
EU DPP Regulation will be applied to imported products, its components and intermediary products the same way as domestic ones.
This is where things get interesting for the rest of the world. Because when the world's third-largest economy says, "We need to know what's in that blender," you either get transparent—or get left behind.

By 2030, DPPs are expected to be mandatory for most industries, with early movers like batteries, textiles, and electronics being prioritized. In fact, the battery passport is already drafted and kicks in by 2026/27

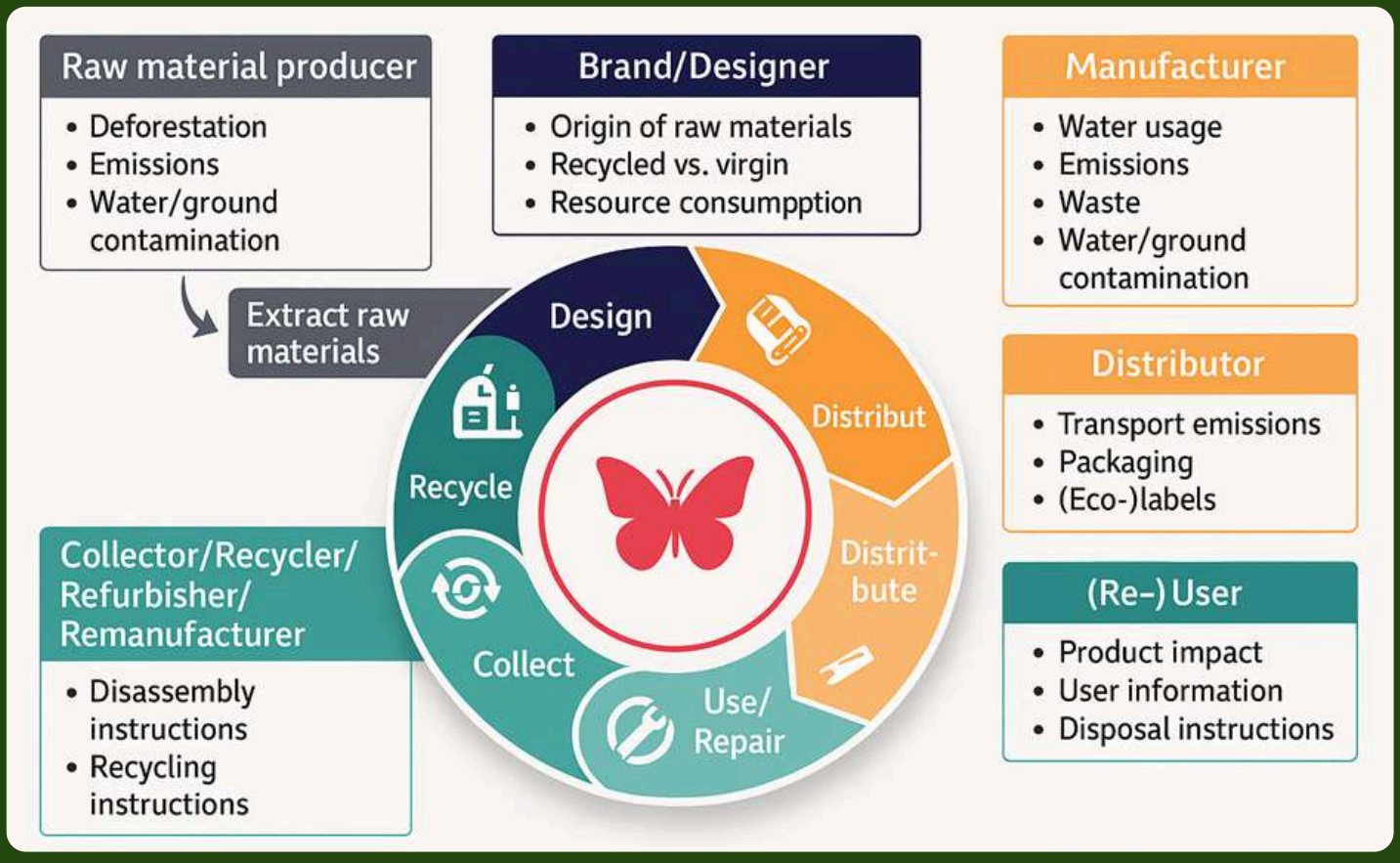
Figure 1:As of 2023, only 7.2% of materials in the global economy are reused. That's a steep drop from 9.1% in 2018. Europe's ambitious Circular Economy Action Plan (CEAP) wants to change that.

WHY NOW & WHY HERE?

We've hit a global inflection point. Europe has been both a culprit and a crusader in the climate saga. The EU is still the fourth-largest greenhouse gas emitter globally, pumping out 3.59 Gt CO_2eq in 2022, with Germany and France leading the pack. At the same time, the region has cut emissions by 32% since 1990, thanks in part to bold policy shifts like the European Green Deal, which commits over €1 trillion to sustainability-linked investments.

CIRCULAR MODEL

Unique Product Identifier	SKU, Batch ID, Serial tag
Material Composition	Raw materials, % recycled
Environmental Footprint	Carbon, water, emissions, packaging waste
Circularity Metrics	repairability, lifespan, ease of disassembly
Data Carrier	RFID tag



BUT ISN'T THIS JUST... MORE REGULATION?

Yes and no.

Yes, it's a regulation. But no, it's not just more red tape. It's a structural shift in how we understand value chains.

In May 2023, the Gulf Petrochemicals and Chemicals Association (GPCA) released a cautionary note. The article laid it bare: companies not ready for this shift, especially those in resource-rich regions, could be caught off guard. If you're a supplier feeding into the European value chain, DPP compliance isn't optional. It's business survival.
What does this mean in practice? It means:

- Middle Eastern chemical producers must now disclose supply chain emissions.
- Asian textile manufacturers need to track recycled content percentages.
- Global electronics brands must prove repairability.

The days of "we didn't know" or "our supplier handles that" are fading fast.

MARKET MOMENTUM

According to a Coherent Market Insights report, the global DPP software market could explode from $240 million in 2025 to $1.27 billion by 2032. That's a compound annual growth rate of nearly 27%.
However, Scope 3 emissions from suppliers and consumers still represent 70-90% of a company's total emissions. And that's where most of the data gaps lie. The World Business Council for Sustainable Development (WBCSD) points out that data on upstream and downstream processes is often missing, inconsistent, or confidential.
That's not just a climate risk. That's a financial liability. Investors are watching. Consumers are caring. Regulators are tightening the screws.
That's why DPPs matter. They standardize information, reduce ambiguity, and create a digital trail that can be audited, optimized and improved.

THE LONG HAUL

The DPP is just the beginning. It's a pebble in a very large pond. And the ripples? They're already touching.

- **Carbon Border Adjustment Mechanisms (CBAM)** – Charging imports based on carbon content
- **Extended Producer Responsibility (EPR)** – Making manufacturers financially accountable for product waste
- **Digital Twins for Products** – Real-time, virtual versions of physical goods.

BUT LET'S BE REAL, ITS NOT PERFECT

DPP looks great on paper but is it fair?
Ah, the million-euro question.

Critics argue that the DPP could widen the gap between high-tech, high-resource countries and those still catching up. Small manufacturers in emerging economies may lack the digital infrastructure to implement complex tracking systems.
And let's not ignore the IP concerns. Some companies fear that transparency = giving away trade secrets.

Valid points.
But here's the counterpoint: the DPP doesn't require companies to spill the secret sauce. It just wants them to list the ingredients.
Think of it like nutrition labeling for products. You don't need to know KFC's spice blend—just the fat and sodium content.

BUT ALSO, ITS KINDA BEAUTIFUL

The Digital Product Passport is a shot at rebuilding trust in the products we consume—at a time when that trust has worn thin. It could empower your next coffee machine to say, "I was made ethically, with 40% recycled steel, and I know where I'll go when I break down."
That's poetic. But also practical.
Sustainability isn't just about emissions or recycling rates. It's about systems that talk to each other, that remember where things came from and plan where they'll go. That's what the Digital Product Passport promises.
It's not perfect. But it's a start.
And honestly, in a world gasping for climate solutions, a start is more than what we've had for a while.

Krita Purthi
IIM Rohtak

World Bank's Climate Investment in South Asia

Hope or Greenwashing?

In recent months, the World Bank has announced huge climate investment packages for South Asia, millions of dollars to help countries like India, Bangladesh, and Nepal fight climate change. These investments are being hailed as a major step toward a sustainable future. But the question is: Are these efforts really going to make a difference, or are they just clever marketing, making us feel like something's being done while nothing truly changes?

Big Numbers, Bigger Questions

The World Bank has promised more than $3 billion in climate financing to South Asia in 2024. A lot of this money is aimed at helping countries adopt renewable energy, improve disaster resilience, and build sustainable infrastructure. India, for example, is set to receive a chunk of this funding for clean energy and water sustainability projects.

On the surface, this sounds great. But when you dig a little deeper, things aren't so clear-cut. While the World Bank funds these green projects, it still supports fossil-fuel projects and large infrastructure in other parts of the world. So, how effective can these new "green" investments really be if they don't align with a broader strategy for global sustainability?

Greenwashing or Green Action?

You've probably heard the term greenwashing—it's when a company or organization makes themselves look more environmentally friendly than they really are. And that's what some critics are worried about with the World Bank's climate financing. They say that while the investments sound impressive, they might not have the lasting, real-world impact we need.

Take hydropower, for instance. It's often labeled as "clean energy," but in some parts of the world, like the Himalayas, building big dams

causes more harm than good. These projects can lead to deforestation, displacement of communities, and even increased flood risks. Similarly, some large-scale solar projects, while cleaner than fossil fuels, may come at the cost of community land rights and biodiversity.

What Does This Mean for India?

For India, where heatwaves, water shortages, and pollution are becoming part of everyday life, climate investment is crucial. But we need more than just big projects that sound good on paper, we need solutions that actually reach the people who are suffering the most.
What's needed are small, community-driven projects like solar panels on rooftops, sustainable farming practices, or local rainwater harvesting systems. These initiatives might not get the same attention as large-scale projects, but they can make a real difference where it counts.

Why Should We Care?

As young people, it's easy to get caught up in the excitement of big promises and flashy headlines. But we need to ask ourselves: Are these investments actually helping? Are local communities being empowered, or are they just getting pushed aside for the sake of a "green" image?
We'll be the ones to live with the consequences of these decisions. So, we have to stay informed, ask tough questions, and demand accountability in the way climate finance is used. It's not enough to just throw money at big projects and hope for the best. We need to make sure that the right solutions are being put in place for the future.

Conclusion

The World Bank's climate investment in South Asia shows that the world is paying attention to the environmental challenges facing our region. But the real test will be whether these funds are used wisely whether they genuinely help those who need it most, or if they're just another form of greenwashing. We need more than just money; we need transparency, local voices, and long-term solutions. Otherwise, we risk building a "green" future that only looks good from a distance.

Pratham Wahane
SRCC

Beneath the Co-Op Tree

It often starts in between classes. Maybe it's the ten-minute walk from the classroom to the canteen, maybe it's that spare hour before a society meeting, we drift toward the same few places without thinking much of it. For me, it’s usually the co-op. Not just for the snacks or the casual catchups, but because it’s shaded, open, and alive. There’s a certain stillness that lives under the co-op tree; a comfort that feels incredibly rare in the rush of SRCC life.

At first glance, this might seem like a lazy observation. After all, we’re in college to learn, network, and chase opportunities, not sit around under trees, right? But if you look closer, you’ll realize: this casual gravitation toward green isn’t coincidental. It’s instinctive. Subconscious. And deeply needed.

In recent years, the idea of climate anxiety has moved from fringe conversations to a very real emotional burden, especially among young people. It’s the sinking feeling that creeps in after you read yet another report about melting glaciers or hear about a city’s water crisis. It’s that guilt we sometimes feel for contributing to the mess, even when the problem feels far too large to fix. And in the middle of all this; studies, placements, social pressures simmer quietly. Most of us don’t even have the words for it.

But the strange thing is, nature does.

There’s something deeply calming about the library lawns at noon, with their thick carpet of grass and students sprawled across it, prepping for a presentation or simply letting the sun settle their thoughts. Or the statue lawn, which becomes a soft-landing spot for friends who are somewhere between tired and reflective, talking about life with their shoes off and phones forgotten. Even the lawns near the

principal's bungalow, which are usually silent and tucked away, seem to offer a pause, a small refuge from the grind of classes and meetings.

It's in these places that you start to realize how much your surroundings shape your state of mind. Green spaces, especially in urban campuses like ours, aren't just "aesthetic". They're quietly functional. Numerous psychological studies have shown that regular exposure to nature, even a fifteen-minute walk across a tree-lined path, can reduce cortisol levels, lower blood pressure, and improve focus. In fact, researchers now say that access to green areas is as essential to mental health as diet or sleep. It's not just about escaping the city; it's about finding small pockets of balance within it.

SRCC, in that sense, is lucky. Unlike many campuses in Delhi that have gradually surrendered to concrete, ours still breathes. The parking lawns, which may look like just empty open space on most days, become essential during fest season, a backdrop for stages, stalls, and hundreds of students moving in rhythm with each other. The sports ground, too, offers more than athletic practice. It offers routine, release, and that rare sense of openness we often don't realize we need. The thrill of a match, the quiet resolve of a morning jog; these too are expressions of grounding oneself in something real.

But the co-op tree remains my favorite. There's something symbolic about it. A place where people from every batch, every society, every corner of SRCC gather. Whether you're eating in silence or caught in a post-lecture debate, whether you're stuck trying to get that one print-out or searching for that sweet network spot, it witnesses you. And that witnessing, somehow, softens the noise in your head.

The irony is that many of us never stop to truly acknowledge this. We use the lawns, walk the paths, sit under the trees but do we ever thank them? Do we ever wonder who plants them, who waters them, who decides which patch stays untouched and which one gets a new bench? In a time when ecological collapse is a global headline, perhaps awareness should start with the ground we sit on.

This isn't a call for activism or some massive sustainability campaign. It

is something more intimate. A shift in attention. The next time you're on campus and find yourself choosing the garden over the hallway, or pausing at the co-op before rushing off to class, linger a little longer. Pay attention to how you feel in those moments. You might discover that the green isn't just a background, it's a balm.

In the end, climate solutions don't always start with policies or protests. Sometimes, they begin with the personal. With recognizing that the trees on our campus are more than ornaments, they are emotional infrastructure. That every patch of shade, every gust of wind across the sports field, is quietly doing the work of calming us down. And in return, all we have to do is notice. Maybe protect them a little. Maybe speak up if they're at risk. Maybe just take care of them like they take care of us.

SRCC has always prided itself on being forward-thinking. As students of such an institution, being forward-thinking today also means being nature-thinking. Because in a world slowly warming up and breaking down, our green spaces might just be the last real grounding we have.

And for now, at least, we still have the co-op tree.

Naimish Dadheech
SRCC

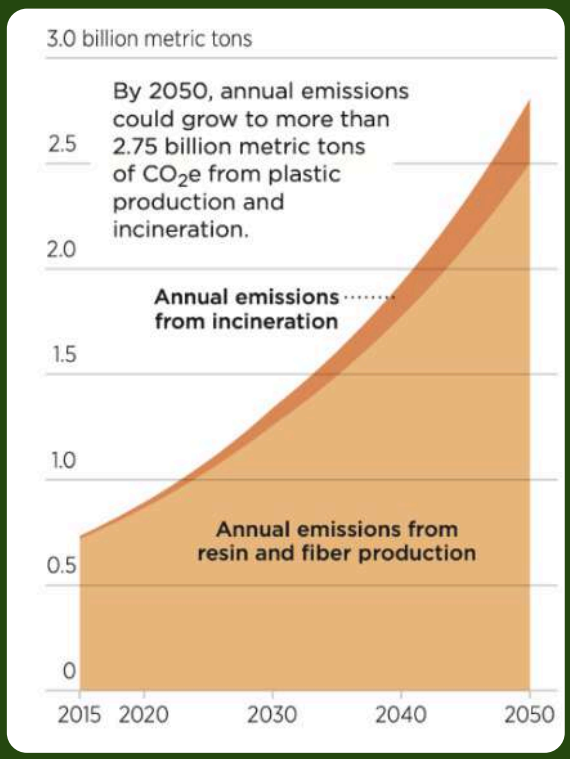
From Waste to Resource

Circular Economy Approaches to Plastic Policy in India

Introduction

In today's fast-paced world, environmental concerns have become more stringent. Among them, plastic pollution is a particularly long-standing issue, with significant contributions to greenhouse gas emissions on the one hand and clogging urban infrastructure as well as oceanic ecosystems on the other. Plastic production and incineration globally released approximately 850 million tonnes of CO_2 in 2019 alone—a figure projected to rise to 2.75 billion tonnes by 2050 if current trends persist. In a country that is moving quickly toward economic supremacy like India, the rising inventory of single-use plastic and inefficiencies in waste management systems are not merely a visual blight; they are an imperative call to systemic and sustainable change.

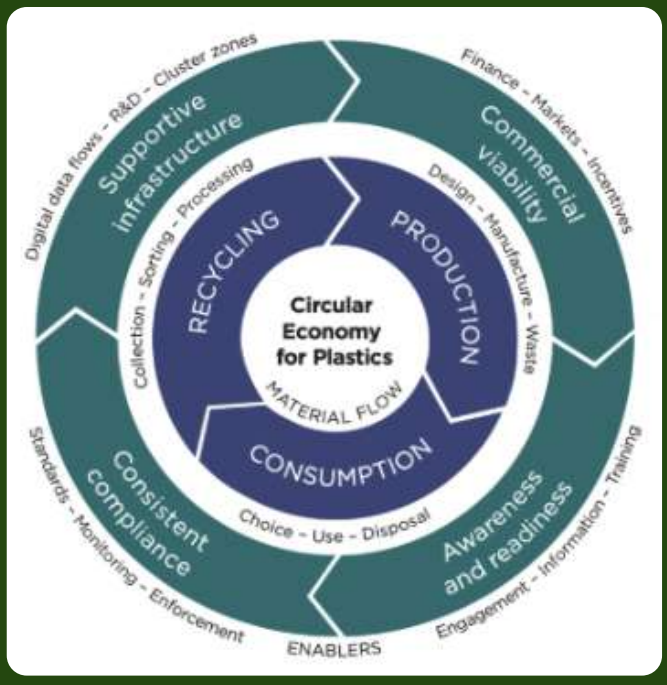
The plastic lifecycle, from manufacturing to disposal, has become a severe environmental crisis. Plagued by its high content of fossil fuels, the plastic sector is a cause of both resource depletion and general ecological degradation. Indian urban areas are no exception, with poor waste segregation practices and clogged landfills depicting a dire scenario of an overburdened system. The unorganized sector, a lifeline to the recycling of waste, functions with little support, leaving employees vulnerable to health risks and financial instability.



This imbalance, between economic progress and environmental urgency, has unveiled the fault lines of a model of linear economy that can no longer be kept intact. The need to reinvent this tale before the damage becomes permanent follows.

The Promise of the Circular Economy

Against this backdrop, the concept of a circular economy comes as a compelling alternative. It proposes shifting away from the traditional 'take, make, use, dispose' model towards a regenerative one on the basis of reuse, repair, refurbishment, and recycling. Rather than viewing waste as an end point, the circular economy views it as the beginning point of a new value chain.



One of the best examples of this change is IKEA's adoption of circular practices. It was once reliant on a linear production consumption model, but IKEA now uses practices such as furniture leasing and buyback programs that enable refurbishment and resale of products into the supply chain. These initiatives highlight the revolutionizing potential of circular thinking, particularly in the redesign of business models to achieve sustainability goals.

At its heart, the circular economy promotes clever, visionary design—products to last, to be repaired in modules, and ultimately reusable. This strategy not only saves virgin resource dependency but also lowers emissions by a substantial amount. The onus is clear: plastics need to be reimagined not as end-of-life rubbish, but as renewable resources to be cycled back in.

Technological innovation and new recycling technologies, as necessary as they are, are not enough in themselves. Sustainable change is a synergistic combination of various policy and collaborative practice

enablers. India has achieved impressive progress in this respect. Extended Producer Responsibility (EPR) under the Plastic Waste Management Rules means making producers responsible for the lifecycle of their products, encouraging more sustainable substitute products.

Collaborative initiatives, such as the India Plastics Pact launched in 2021, are a good illustration of multi-stakeholder action throughout the plastics value chain. Moreover, partnerships such as that between the United Nations Development Programme (UNDP) and Hindustan Coca-Cola Beverages are an illustration of the scalability of collaborative waste management solutions in Asia.

To further integrate circularity into the economy, policy can include initiatives like deposit-refund systems, tax credits for green innovation, and recycled content standards. These would not just initiate industrial compliance but also bring about an enabling environment for economic and environmental co-benefits.

The Role of Government

The role of the government in leading this transition is both pivotal and multifaceted. As a policy and facilitating force, it must set the pace for systemic transformation by legislating and enforcing robust environmental legislation. Eco-design, sustainable procurement, and high-efficiency recycling infrastructure policies are pivotal in making this transition feasible.

Similar importance should also be given to formalizing and mainstreaming the informal sector that employs the majority of India's waste recovery labor force. Granting these workers formal employment status, training, and protective gear will improve their living standardsand overall performance of waste management systems. Concurrently, social campaigns have the ability to instill a culture of environmental protection, encouraging citizens to actively participate in sustainable consumption and segregation practices.

Conclusion:

Towards a Harmonious, Sustainable Future Plastic waste management in India is an opportunity and a challenge—a crossroads at which environmental imperative and economic vision must meet. The profligacy of the linear economy has shown its limitations in the age of escalating ecological crises. The circular economy, on the other hand, presents a real and visionary route—one in which waste is wealth, and sustainability is a common purpose. By striking a delicate balance between technological creativity, visionary policy, and broad-based partnership, India has the opportunity to redefine its environmental course. It is imperative that the stakeholders seize the moment to envision consumption and production patterns in a way that reconciles economic advance with ecological integrity. In so doing, India will not merely address its plastic waste issue, but also put into practice a resilient, regenerative economy—making environmental sustainability not an encore performance, but the curtain raiser of the future.

Kartikeya Shukla
SRCC

Shubham Mahtoliya
SRCC

Sky’s Loss or Mine?

The storms hum loud,
and sleep escapes again.
The night's too dark,
the weather too warm,
the storms, not of rains,
but smoke, fire and dust.
Is it the bad weather or just my insomnia?

So, I walk out to the balcony,
like I used to, when I was little.
Looking at the stars always helped,
laying calmly in her lap,
Grandma’s hands gently caressing my hairs,
the scent of fresh flowers,
of rain-kissed mud,
the cool chilly breeze ruffling past my hairs,
the ground felt cool & the air so clean.
On her lap, I'd curl up and lean,
opening my eyes to gaze at the clear moonlight sky and the stars!
They shone brightly all across the sky,
so close they seemed, I thought I could touch them.
The weather, the skies, the air, the nature,
all seemed perfect until she said that
"someday I'll too become a star."
I loved stars but not as much as I loved her,
so I'd shut my eyes, pretending to have not heard,
& doze off past her lullaby.

Standing here in my hostel balcony,
recollecting the good old days,

when air was fresh & not choking,
when sunshine was a warm embrace & not a burning scar,
when rains had a season & not an unlimited gust,
when nature was the closest peek into paradise.

But now,
the hot sun winds hit me & dirt entangles my hair.
I cough not due to cold but dust.
I smell not mud but garbage left open nearby.

I hate to open my eyes,
for now she is gone,
& so are the stars.

I don't know what hurts more:
missing her warm tight hugs,
or realizing that the sky has no room for the star she once promised to become.

I look above, & search so hard till my eyes burn,
& tears roll down my cheeks,
not from smoke, but from emptiness &
questions still unanswered.

Did she become a star?
Or is it the pollution not letting me see my star?
Or did the sky, like me, lose her too?

I wonder,
did she ever go?
Or is waiting still?
For skies to tear & make space for her,
so she could shine brightly,
& tell me from the galaxies, to shine brighter than her.
Maybe if the world was cleaner,
it could hold a love like hers.
But now, even the heavens seem polluted.
I still stand here in my balcony,
hands empty,

craving her embrace,
eyes closed,
seeing the world that looks like a distant dream,
my heart full of little hope,
wishing for just one clear night,
to see her again!

Samriddhi Sahu
SRCC

IN CONSERVATION WITH

MR. GOBIND SAGAR BHARDWAJ

Dr. Gobind Sagar Bhardwaj, a distinguished Indian Forest Service (IFS) officer of the 1994 Rajasthan cadre, has dedicated his career to wildlife conservation and forest management. With a Ph.D. and gold medal in M.Phil (Botany), he combines academic excellence with extensive field experience.

His remarkable journey includes surviving a life-threatening tiger attack during his early posting in Bundi - an event that strengthened his commitment to conservation. As the former Field Director of Ranthambore Tiger Reserve and current Additional Director General of Forests (Project Tiger), he has played a pivotal role in India's tiger conservation efforts, including the ambitious cheetah reintroduction project.

An accomplished author (Tracking Tigers in Ranthambhore) and recipient of the Sanctuary Asia Best Wildlife Photographer Award, Dr. Bhardwaj brings unique perspectives on balancing ecological preservation with sustainable development.
In this candid interview, he shares insights from his three-decade long service and his vision for India's wildlife future.

Anmol: To begin on a deeply personal note—just a month into your service in 1997, you survived a tiger attack. May I ask how that life-altering encounter shaped both your personal philosophy and your professional path in conservation?

Gobind Sir: It's all karma and fate. Just after my passing out from Indira Gandhi Forest Academy in May 1997, this incident happened on 30th of June, when I was posted as Assistant Conservator of Forests in Bundi. Bundi is a small district of Rajasthan lying adjacent to Ranthambhore Tiger Reserve, which is the source of tigers that often disperse through connecting corridors in Ramgarh Vishdhari Sanctuary (now a tiger reserve). So, it was a dispersing tiger that had travelled to a village called Dablana adjoining a river called Maje that passes through Ramgarh Sanctuary. After receiving a message in the morning hours of the day, I rushed to the site to assess the situation and was mauled badly by the same tiger while we were assessing the situation in the field. I sustained deep wounds with three broken ribs and more than 50 stitches in the back. Remained in Bundi district hospital for weeks in the sultry month of June.
After that incident, I went to Wildlife Institute of India for doing a PG Diploma in Wildlife Management. It was there where I developed a deep passion for wildlife and served in different capacities for managing natural and wildlife areas like Ranthambhore Tiger Reserve, Sariska Tiger Reserve, Desert National Park, and many forest divisions. While serving as faculty in Wildlife Institute of India, I developed a deep interest in research, including surveys of birds. I have photographed more than 900 species of birds in the country.
For the last one year, I have been heading Project Tiger as ADG Project Tiger and Member Secretary, National Tiger Conservation Authority. A tiger attack survivor at the beginning of service turning into the head of Tiger Saviours of the nation is nothing but karma and God's grace.

Anmol: Your academic roots lie in botany, yet your career has led you to champion the cause of apex predators. Could you share what inspired this transition—and how your scientific grounding in plant life continues to inform your conservation strategies today?

Gobind Sir: Yes, I did my Bachelors in Biosciences and Masters in Botany. I did my MPhil in Ecology specializing in water pollution. That helped during my tenure as Member Secretary, Rajasthan State Pollution Control Board, but for a smaller duration. Although I developed a deep passion for tigers and co-predators during my tenure as Director in Ranthambhore and Sariska, it was my PhD thesis that I enrolled in at the University of Rajasthan on birds of Sitamata Sanctuary that made me an active birder and later one of the top eBirders of the country.
As far as plant life is concerned, they are the primary producers responsible

for the whole food chains, food webs, and ecosystems. If the health of vegetation is good, then the whole ecosystem is healthy. We also believe that the tiger is considered the pulse of the forest ecosystem. That's why Project Tiger was launched in 1973.

Anmol: The number of tigers in India was estimated to be 2967 in 2018 and 3682 in 2022. How was this magnificent feat achieved, and what were the policies and measures undertaken?

Gobind Sir: Well, Project Tiger was launched in 1973 with a humble beginning covering only nine tiger reserves. As of today, with the notification of Madhav Tiger Reserve, we have 58 tiger reserves in the country, spreading across almost all the biogeographic zones, covering approximately 85,000 square kilometers.
Although there was a drastic decline of tigers when the story of total extinction was reported from Sariska and Panna tiger reserves almost two decades ago, subsequently, after the amendment of the Wildlife Protection Act, 1973 in 2006 and the creation of the National Tiger Conservation Authority, the tiger number increased to 3682 as per the 5th cycle of All India Tiger Estimation.
Scientific monitoring of predators, co-predators, herbivores, and their habitat; the concept of Core-Buffer zones; creation of inviolate spaces in the core areas through voluntary relocation of villages; scientific management of the landscape following Tiger Conservation Plans; community support; responsible nature tourism; and sensitization are the key elements of the success of tiger conservation.
India has shown leadership in big cat conservation, especially tigers, either through the successful re-introduction of tigers in Sariska Tiger Reserve and Panna. We also boast that 70 percent of the world's tigers roam wild in Indian jungles!

Anmol: Could you briefly share the key technologies currently being used to track and monitor tigers in forest reserves, including how AI and digital tools are helping in detecting poaching activities and ensuring real-time protection?

Gobind Sir: Two decades back, pugmark counts, direct sightings, scratch marks, scats, or kills were the indirect measures to monitor these big cats. With the advent of technology, wildlife monitoring has become easier. Digital cameras have played a major role—camera trap methods, radio collars using VHF or satellite tracking have helped in knowing the exact location of tigers.
In addition, applications like M-STrIPES used by all tiger reserves not only help in monitoring wildlife and vegetation but also help in assessing the effort made for patrolling in the jungle. The photo record of tigers is vital for

crime detection and for generating evidence regarding the origin of skins, thereby strengthening cases in the court of law for the conviction of offenders.
Similarly, radio/satellite tracking of tigers helps in alerting staff and villagers once the tiger strays into human habitation by giving prior alerts. Such AI technology inbuilt in camera traps and collars helps in mitigating human-tiger conflicts.

Anmol: India's cheetah reintroduction has sparked global curiosity. What have been your key takeaways from managing such a historic and experimental project?

Gobind Sir: A major initiative for the re-introduction of cheetahs, which got extinct in the country in the 1950s, was taken up by the Government. Now the question arises—why do we need cheetahs when we already have four big cats? As the tiger is for forest ecosystems, the cheetah is considered the pulse for grassland ecosystems. Cheetah is considered a flagship species of grasslands, especially savanna grasslands.
With the objective of conserving ONES (Open Natural Ecosystems) landscapes, the conservation introduction of cheetahs was thought through. Based on the action plan prepared by NTCA and Wildlife Institute of India, the first batch of eight cheetahs was brought from Namibia to Kuno National Park, Madhya Pradesh, in 2022. Later, twelve more cheetahs from South Africa were brought to Kuno National Park in 2023.
With the subsequent birth of some cubs in Indian soil and also the mortality of a few individuals, the current population of cheetahs has grown to twenty-six, with twelve adults and fourteen cubs. Intensive monitoring of these animals is being done jointly by Madhya Pradesh Forest Department and Wildlife Institute of India under the overall supervision of the National Tiger Conservation Authority.
Encouraged by the success of the cheetah reintroduction in Kuno National Park, Gandhisagar Wildlife Sanctuary in Madhya Pradesh was identified as the second site for cheetah re-introduction. Necessary infrastructure facilities, including a predator-proof fence, quarantine bomas, prey augmentation bomas, and veterinary facilities, have already been developed in the area.
Last week, a coalition of two cheetahs, Pakak and Prabhas, were relocated to the natural closed area of Gandhisagar WLS. Earlier, a team of experts from South Africa had already visited both Kuno NP and Gandhisagar WLS and expressed satisfaction over the management interventions. A team of officers from India is likely to visit South Africa and Botswana in the coming months for high-level discussions with government officials and experts for bringing more cheetahs.
For developing a cheetah conservation centre, Banni area in Kutch district of Gujarat has already been chosen. Banni Grasslands—a mosaic of savannah

grasslands, seasonal wetlands, and marshy salt flats—are well known for their unique and diverse flora and fauna. The Detailed Project Report (DPR) will soon be submitted by the Government of Gujarat.

Anmol: Wildlife conservation efforts in India are often driven by executive agencies and government bodies. In your view, how can youth and the general public play a more active and meaningful role in wildlife conservation beyond formal programs?

Gobind Sir: Yes, it is true that most wildlife conservation efforts are driven by the Government; however, the role of local communities, civil societies, and the judiciary cannot be ignored. Sensitizing youth through regular interactions with school children, organizing nature camps in reserves or parks, organizing safaris in tiger reserves or national parks, and regular interaction by park staff with school children in schools are some of the ways of involving youth in nature conservation.
Above all, the need for education of children right from an early age towards conscious living should be a subject taught religiously in all schools. As local youth, including school children, are the ambassadors for natural resource conservation, let the message be spread through them—not only to their elders and neighbours but also making them a bridge that facilitates the handing over of this natural heritage to future generations.

In this inspiring conversation with Shri Gobind Sagar Bhardwaj, we traversed a remarkable journey—from a life-altering tiger attack at the very start of his career to his pivotal leadership in India's conservation landscape today. His deep-rooted passion for ecology, relentless commitment to wildlife protection, and faith in the symbiosis between nature and human communities offer not just insights, but a call to action for all of us. As he reminds us, conservation is not the duty of a few but a collective responsibility that must be nurtured across generations. It is only through such shared dedication that the vibrant tapestry of India's natural heritage can continue to thrive.

COLLABORATION REPORT

At CGI, collaboration is at the heart of impactful change. This year, we joined hands with leading organizations to amplify our efforts in environmental sustainability and awareness. Each partnership brought with it a unique perspective, greater outreach, and a shared mission for a greener tomorrow.

E-WASTE AWARENESS CAMPAIGN WITH JIT INC

In collaboration with JIT Inc., a renowned Japanese firm committed to sustainability, CGI launched an impactful e-Waste Awareness Campaign on campus. Three dedicated e-waste collection boxes were installed across key student and faculty zones, encouraging responsible electronic disposal among the SRCC community. The initiative also featured an interactive seminar conducted by JIT representatives, educating students on the growing e-waste crisis and the importance of proper recycling. The collaboration helped initiate long-term behavioral change, making responsible tech disposal an everyday habit.

GREEN DIWALI WITH PROJECT GREEN AND GARBAGE

CGI partnered with Project Green and Garbage to celebrate a truly Green Diwali—an event that blended festivity with environmental consciousness. Through diya-painting sessions, eco-rangoli competitions, and engaging awareness stalls, the campaign highlighted the environmental impact of firecrackers, excessive waste, and light pollution. The initiative encouraged the SRCC community to embrace low-impact celebrations and reinforced the idea that traditions can thrive without compromising nature.

YAMUNA CLEANLINESS AND WATER AWARENESS DRIVE WITH SANT NIRANKARI FOUNDATION

In a powerful collaboration with the Sant Nirankari Foundation, CGI organized a Water Conservation Seminar and a Yamuna Cleanliness Drive, spotlighting one of India's most pressing environmental issues—river pollution. Volunteers from SRCC and the Foundation came together to clean the Yamuna Ghat, demonstrating the strength of community-led action. The seminar that followed shed light on the concept of 'Day Zero', the importance of water preservation, and ways individuals can contribute to water sustainability in daily life. The event left participants with a renewed sense of purpose and environmental responsibility.

These collaborations reflect our belief that meaningful change begins with shared action. By working together with committed partners, CGI continues to expand its impact and inspire a greener, more responsible future. We look forward to building more such alliances in our journey toward sustainability.

YAMUNA BIODIVERSITY PARK
A FIELD TRIP

The Centre for Green Initiatives marked World Wetlands Day with an enlightening visit to Yamuna Biodiversity Park, led by faculty advisor Sunil Sir. The event commenced with inspiring addresses from eminent dignitaries, including Prof. Emeritus C.R. Babu (Project In-charge, DDA Biodiversity Parks) and Dr. Faiyaz Khudsar (Director, MoEF&CC), who shared profound insights on wetland conservation, drawing from their extensive expertise. Officials from DDA, Clean Ganga Mission, Wetland International, and CEMDE echoed the urgency of preserving these ecosystems through compelling career anecdotes.

A guided tour by park officials showcased the wetland's vibrant flora and fauna, highlighting its role in sustaining biodiversity. From rare plant species to migratory birds, each discovery reinforced the ecological significance of wetlands. The trip concluded as a deeply insightful experience, blending expert knowledge with firsthand exploration, leaving participants inspired to champion wetland conservation.

MEET THE TEAM

CHAIRPERSON

Prof. Simrit Kaur (Principal)

CONVENOR

Prof. Rachna Jawa

FACULTY MEMBERS

Mr. Sunil Kumar, Dr. Franky Varah, Ms. Poonam
Mr. Sudhanshu Yadav, Mr. Satya Kam Gupta, Mr. Shiv Nandan, Mr. Jatin Lamba & Mr. Sanjay Dobhal

CABINET

Navya Krishnatri (President), Bhavya Chaturvedi (Vice President), Glorious (Chief Coordinator) & Mahi Jaiswal (Joint Secretary)

JUNIOR MEMBERS

Kanishk Mishra, Anmol Anand, Archit Singh, Mayapriya K, Diksha Sheroen, Aditya C, R Sandeep, Shouraya Agarwal, Aryan, Kartikeya Shukla, Keshav Kapoor, Manas Ujjainiya, Narendra Yadav, Vasu Khandekar, Rachit Jain, Utkarsh Mittal, Utkarsh Singh, Shubham Mahtoliya, Siddhartha Mishra & Brij Nandini

GALLERY

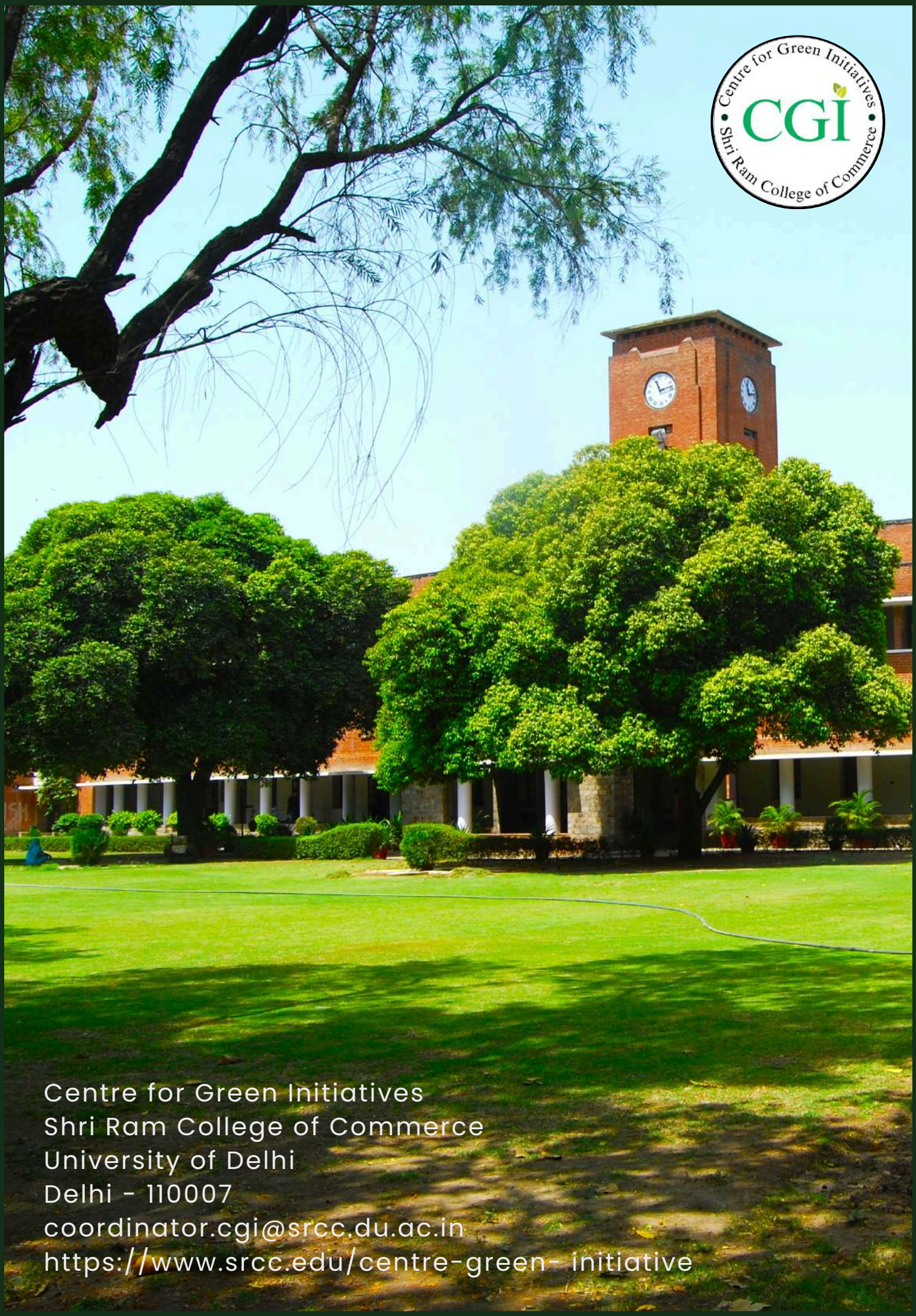

FROM GLITTER
TO GARBAGE:
Diwali' s Waste Problem


CENTRE FOR GREEN INITIATIVES
SRCC


Ms. Sonal Gupta


OUTSTANDING ALUMNI CONTRIBUTORS
RECYCLING-BOX
रीसायकल बॉक्स
Box for disposal of used ink bottles & cartridges


7
Dr. Rachna Jawa
Convenor
Centre for Green Initiatives



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