

Annual Magazine 2023-2024

SRISHTI

ARANYA-The Nature and Environment Society of ZHDC



“ Res publica
Over Green Cover



FROM THE PRINCIPAL'S DESK



Dear Esteemed Readers,

It is with great pleasure that I welcome you to the third edition of our annual magazine, “Srishti.” This year, we embark on a journey that transcends mere words—a journey that resonates with purpose, action, and responsibility.

“Respublica Over Green Cover”

The theme for this year’s magazine. “Respublica, over green cover ” encapsulates the very essence of our institution. It is more than ink on paper; it is a clarion call to safeguard our planet, to nurture its delicate ecosystems, and to empower our students as stewards of change. Let us delve into the heart of this theme—a theme that bridges the gap between environmental discourse and practical action. As we compile this magazine, let us remember that each page carries the potential to ignite minds, spark conversations, and inspire action. Our words matter, but our deeds matter more. Let’s bridge the gap between discourse and practice, weaving a narrative that resonates far beyond our campus.

I extend my heartiest congratulations to the entire team of “Srishti” for this remarkable initiative. May our collective efforts echo through time, shaping a greener, more compassionate world.

With warm regards,
Prof. Narendra Singh
Principal

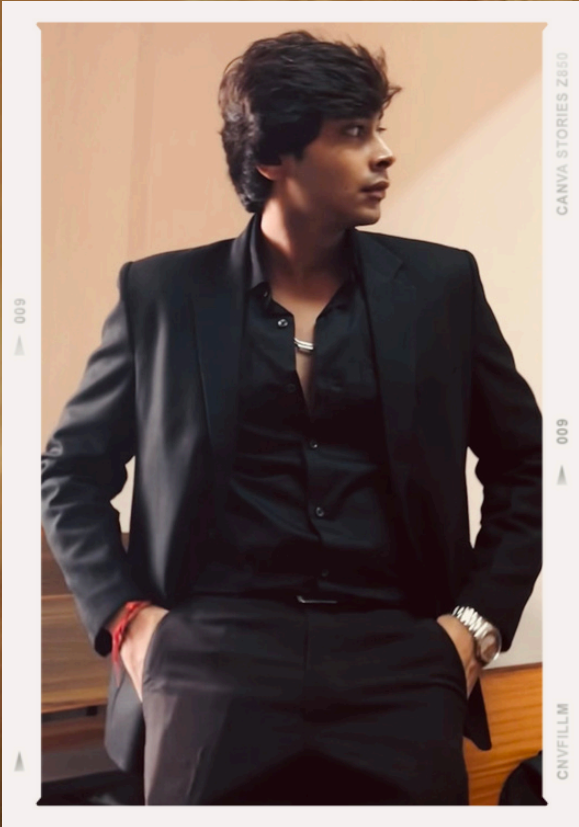
CONVENOR'S MESSAGE



It brings me great pleasure to announce the successful launch of the Nature and Environment Society magazine SRISHTI 2023-24. With increased concern about climate change, biodiversity loss, and natural resource depletion due to human activities, it is critical to raise public awareness about the need for environmental conservation. The primary objective of this magazine is to spread awareness about the need for the conservation and preservation of the environment for future generations. This magazine has made a sincere effort in this regard, bringing to the public's attention some of the concerns surrounding the destruction of nature and the environment and the need for environmental conservation so that they can better comprehend and know them. This edition exhibits our young students' thoughts on many issues connected to nature and the environment, academics, society, and so on and sparks young minds on constructive ideas to bring about sustainable development. It is our objective to promote the students' diverse ideas and thoughts, inspiring everyone to be engaged learners and future leaders. I'd like to take this opportunity to commend the entire team Editorial Board and students on their efforts to put out this creative venture.

Dr Ragesh P. R
Convenor

EDITOR'S NOTE



We are delighted to present the third edition of our annual magazine, 'Srishti', a reflection of our commitment to environmental consciousness. It is with a profound sense of responsibility and honor that I, Bharat Gautam, address you as the Chief Editor of Shrishti of Aranya. Our publication, rooted in the fertile grounds of Zakir Hussain Delhi College's environmental society (Aranya), stands as a beacon of hope and action in the face of ecological challenges.

Our guiding philosophy, "Respublica Over Green Cover," transcends mere words. It is a narrative that elevates the public good above the superficiality of green facades, revealing the pressing issues that lie beneath. We refuse to accept environmentalism as a passive concept relegated to papers and policies. Instead, we are committed to animating these issues, ensuring they resonate with the lived experiences of every individual.

The path from ideation to implementation is laden with

obstacles. The disconnect between rhetoric and reality, between boardroom policies and their execution, is a chasm we are dedicated to closing. Shrishti is at the forefront of this transformation, championing environmentalism as a practical reality, a movement of thought and action.

Optimism is the cornerstone of our philosophy. It is through this lens that we confront the challenges ahead, eschewing the cynicism that often clouds environmental discussions. We focus on the potential for progress, the opportunities for innovation, and the countless ways we can contribute to a more luminous future. In alignment with our mission, I leave you with a quote that captures our ethos:

"Environmentalism is the art of possibility, the canvas of our collective conscience, and the brushstroke of our actions. It is the philosophy that nurtures hope and fosters change."

Let this message stand as a testament to our unwavering commitment to environmentalism not as an abstract concept, but as a vibrant, living philosophy that informs every facet of our work. May it serve as a reminder of the profound impact we can achieve when we unite under the banner of environmentalism.

With sincere regards,
Bharat Gautam,
Editor in chief Aranya

Editorial Team



Bharat Gautam
Editor-In-Chief



Lakshya Chettri
Editor



Kalrav Tyagi
Editor



Shashwat Choudhary
Editor



Ankit Mishra
Editor

Design Team



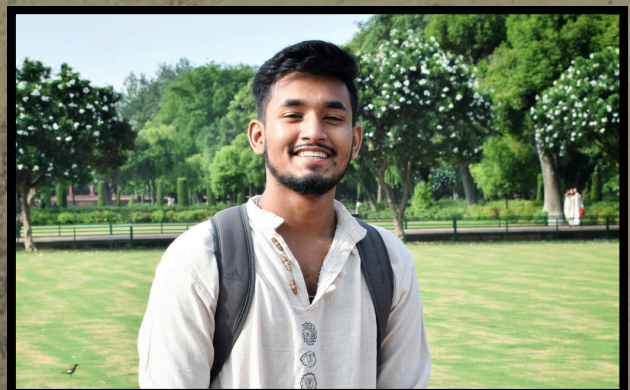
Tiskeen Laba
Design Head



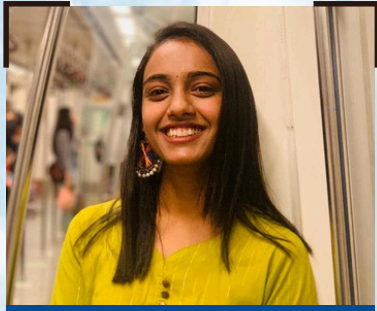
Debankur Kalita
Designer



Geetansh Gautam
Designer



Hritik Raj
Designer



Simran
President



Prince Saharan
Vice-President



Suyash Pandey
General Secretary



Harshit Tomar
Secretary



Punnya
Joint Secretary

MEET THE CORE TEAM



Tiskeen Laba
Social Media Head



Sanskar Jain
Graphics Head



Nakul Shokeen
PR Head



Bharat Gautam
Editor-in-Chief



Anu Kanwar
Event Coordinator

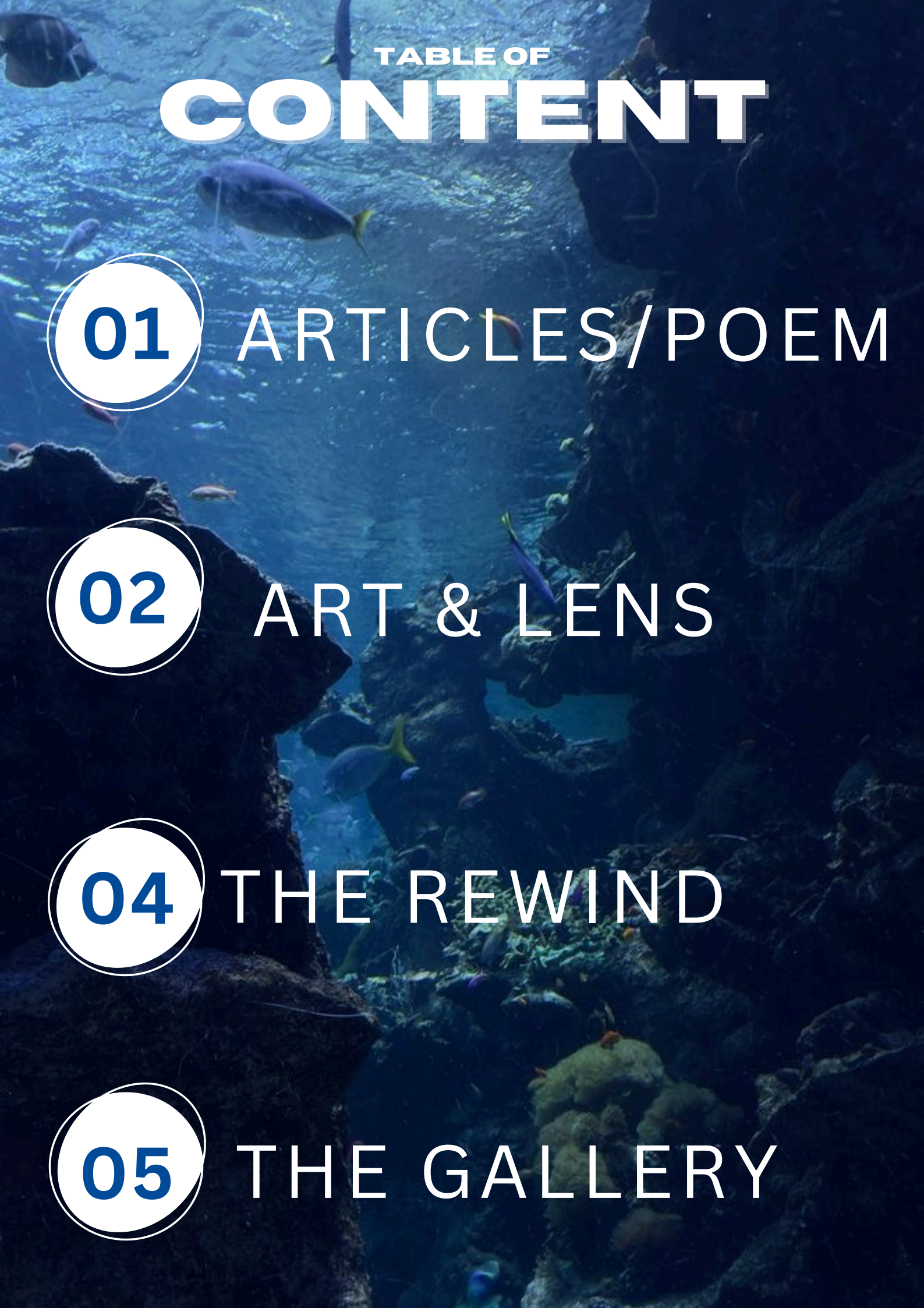
An underwater scene with various fish swimming in clear blue water. In the foreground, there are dark, jagged rock formations. The background shows a vast expanse of water with more fish and some coral reefs. The overall lighting is bright and natural, typical of an underwater environment.

TABLE OF
CONTENT

01

ARTICLES/POEM

02

ART & LENS

04

THE REWIND

05

THE GALLERY



RES PUBLICA OVER GREEN COVER: A METAPHORICAL EXPLORATION

"Res Publica Over Green Cover" is a phrase that elegantly merges Latin sophistication with English practicality, inviting us to delve deeper into its essence, to look beyond the surface, and to ponder the intricate relationship between societal welfare and the conservation of our natural environment. It encourages us to unravel the layers of meaning it holds, to explore the nuances it embodies, and to reflect on the delicate equilibrium between the well-being of society and the protection of our planet's ecosystems.

The phrase "Res Publica Over Green Cover" is a blend of Latin and English, symbolizing the importance of collective welfare and the harmony between human society and the natural world. In the ancient language of Rome, "Res Publica" signifies the common good or the public affairs that sustain a community, representing the essence of a thriving society. The term "Over," a simple English preposition, carries a profound significance, suggesting authority, elevation, or even transcendence. "Green Cover" evokes the lush vegetation that envelops our Earth, including forests, meadows, and greenery that breathe life into our planet, symbolizing the nurturing embrace of nature.

Combining these elements, the phrase "Res Publica Over Green Cover" conveys a powerful message about prioritizing the public good and recognizing the interconnectedness of human well-being and environmental health. It prompts us to envision a vibrant community where the commonwealth flourishes through institutions like schools, hospitals, markets, and governance, highlighting the importance of thriving citizens in a cohesive society. Yet, as we advance and grow, it's crucial to reflect on the repercussions for the natural environment, since our endeavors frequently incur a cost to the verdant canopy that supports life.

The green cover silently endures the consequences of human activities, bearing witness to the loss of biodiversity, pollution, and habitat destruction. Notwithstanding its essential function in preserving ecological harmony, the voice of nature is frequently eclipsed by the demands of progress and development. The phrase "Res Publica Over Green Cover" serves as a reminder of the delicate balance between human needs and environmental stewardship, challenging us to find a harmonious coexistence that benefits both society and nature.

To achieve this equilibrium, we can embrace initiatives such as urban green spaces, sustainable development practices, and environmental education. By integrating green spaces into urban areas, adopting eco-friendly technologies, and spreading awareness about the importance of conserving nature, we can envision a future where public welfare and the green canopy exist in harmony. As responsible custodians of the planet, we are called to prioritize empathy, reverence, and purpose in our actions, ensuring that the res publica and the green cover can thrive together in a sustainable and symbiotic relationship.

In the serene early morning hours, as the gentle dew delicately caresses the leaves of the trees, it is crucial for us to reflect on the essence of our shared heritage: the prosperity of our commonwealth is deeply intertwined with the profound insights whispered by the ancient forests. Hence, let us come together in a coordinated attempt to enhance our voices, not in a dissonance of dissent, but in a melody of cooperative partnership towards a lasting future.



THE HIDDEN THREAT: NUCLEAR WASTE AND THE CURRENT GEOPOLITICAL RACE

In today's world, the geopolitical landscape is constantly evolving, shaped by various factors including economic power, territorial disputes, and technological advancements. Amidst this complex environment, the issue of nuclear waste has emerged as a critical concern, influencing the current geopolitical race among countries. As nations vie for dominance and seek to secure their energy needs, the management and disposal of nuclear waste have become key considerations with far-reaching implications.

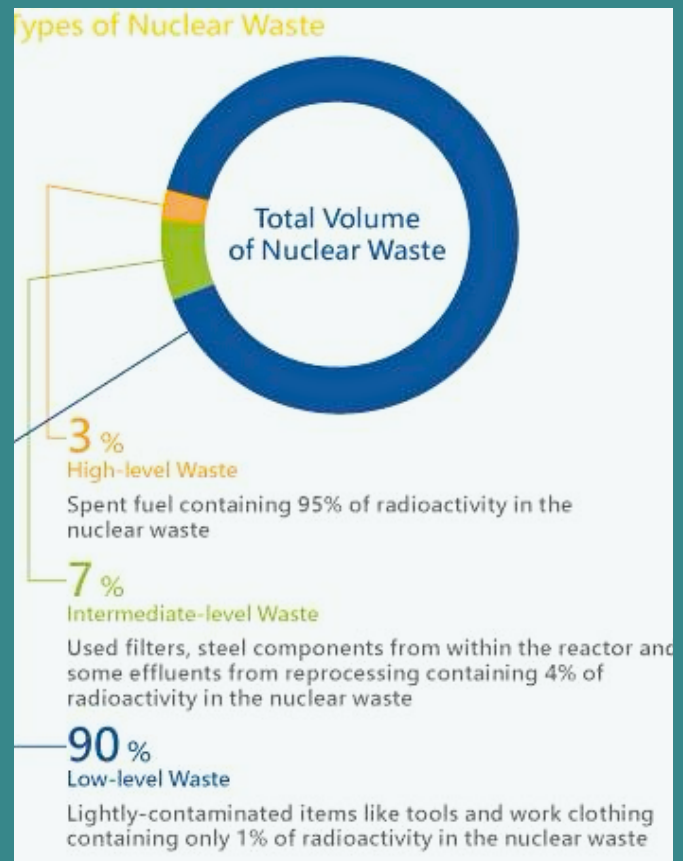
What is nuclear waste, and what do we do with it?

The electricity generated from nuclear reactors results in small amount of waste and has been managed responsibly since the dawn of civil nuclear power. There are several management strategies in practise, such as direct disposal or reuse in reactors to generate more low-carbon electricity.

Like all industries and energy-producing technologies, the use of nuclear energy results in some waste products. There are three types of nuclear waste, classified according to their radioactivity:

- low
- intermediate
- high-level

The vast majority of the waste (90% of total volume) is composed of only lightly contaminated items, such as tools and work clothing, and contains only 1% of the total radioactivity. By contrast, high-level waste – mostly comprising used nuclear (sometimes referred to as spent)



fuel that has been designated as waste from the nuclear reactions – accounts for just 3% of the total volume of waste, but contains 95% of the total radioactivity. Nuclear energy plays a significant role in meeting the growing global demand for electricity, offering a reliable and low-carbon alternative to traditional fossil fuels. However, the use of nuclear power also generates radioactive waste, which poses serious environmental and health risks if not properly managed. Nuclear waste is comprised of various radioactive materials produced during the fission process in nuclear reactors, including spent fuel rods, contaminated equipment, and other byproducts.





ENVIRONMENTAL AND ETHICAL CONSIDERATIONS

As countries compete for dominance in the geopolitical arena, the management of nuclear waste emerges as a critical issue with profound environmental and ethical implications. The disposal, storage, and treatment of radioactive waste present complex challenges that extend far beyond national borders, requiring careful consideration of environmental sustainability, public health, and ethical stewardship. In the current geopolitical race among countries, navigating these environmental and ethical considerations is paramount to ensuring responsible nuclear waste management and promoting global well-being.

•Environmental Impact:-

The environmental impact of nuclear waste is a primary concern that transcends geopolitical boundaries. Improper disposal or leakage of radioactive materials can lead to soil contamination, water pollution, and ecosystem disruption, posing significant risks to biodiversity and environmental health. The long-term persistence of radioactive isotopes further exacerbates environmental degradation, with potential consequences for future generations. In the geopolitical race for nuclear waste management, countries must prioritise environmental sustainability and adopt strategies that minimise the environmental footprint of nuclear energy production and waste disposal.

•Public Health and Safety:-

Exposure to radiation from nuclear waste can have severe health consequences, including increased cancer risk, genetic mutations, and reproductive abnormalities. Vulnerable populations, such as communities living near nuclear facilities or waste disposal sites, are particularly at risk of adverse health effects. Ethical considerations demand that countries prioritise the well-being of their citizens and implement stringent safety measures to mitigate the risks associated with nuclear waste disposal. Transparency, public engagement, and community involvement are essential aspects of ethical decision-making in nuclear waste management.

THE GEOPOLITICAL IMPLICATIONS

In the intricate web of international relations, nuclear waste management stands as a pivotal issue, carrying significant geopolitical implications that ripple across borders and shape the strategic interests of nations. As countries grapple with the complexities of nuclear energy production and the subsequent disposal of radioactive waste, a range of geopolitical dynamics come into play, influencing diplomatic relations, security considerations, and global power dynamics.

•Security Concerns and Nuclear Proliferation:-

One of the foremost geopolitical implications of nuclear waste revolves around security concerns and the risk of nuclear proliferation. Improper management or disposal of nuclear waste can potentially provide rogue states or non-state actors with access to radioactive materials, heightening the risk of nuclear terrorism or the development of illicit nuclear weapons programs.

•Energy Diplomacy and Resource Competition:-

In the pursuit of energy security and economic development, countries engage in energy diplomacy and resource competition, with nuclear energy playing a significant role in the global energy landscape. The availability of nuclear fuel resources and the capacity for waste management influence diplomatic relations and strategic alliances among nations. Countries with advanced nuclear capabilities often leverage their expertise in nuclear technology and waste management as a means of exerting influence and forging partnerships with other nations.



ECONOMIC CONSIDERATIONS

Beyond its environmental toll, nuclear waste exerts a significant economic burden on nations engaged in its management. The construction and maintenance of storage facilities entail substantial costs, diverting resources away from other critical sectors. Moreover, the prospect of nuclear accidents and subsequent cleanup efforts can inflict staggering financial losses, as seen in the aftermath of Chernobyl and Fukushima. As countries weigh the economic viability of nuclear energy against its inherent risks, the issue of nuclear waste looms large on the geopolitical stage.

STRATEGIC IMPLICATIONS

In addition to environmental and economic factors, the management of nuclear waste carries profound strategic implications for nations vying for global influence. The possession of nuclear capabilities confers strategic leverage, shaping diplomatic negotiations and security alliances. However, the proliferation of nuclear technology raises concerns regarding the potential diversion of materials for nefarious purposes, including the development of nuclear weapons. As countries navigate the delicate balance between energy security and non-proliferation efforts, the handling of nuclear waste emerges as a pivotal factor in shaping geopolitical dynamics.

CONCLUSION

Ultimately, the impact of nuclear waste on the current geopolitical race cannot be underestimated. As countries jockey for position on the world stage, the responsible management of nuclear waste must be a top priority. Failure to address this issue could have dire consequences for the planet and its inhabitants, making it imperative that nations come together to find solutions. In the quest for global dominance, the impact of nuclear waste extends far beyond national borders, influencing the geopolitical landscape in profound ways. As countries navigate the complexities of nuclear energy production and waste management, they must reckon with the environmental, economic, and strategic implications of their choices. By embracing sustainable practices, fostering international cooperation, and prioritizing safety and security, nations can navigate the geopolitical race for nuclear waste while safeguarding the planet for future generations.



Bill Gates' Literary Contributions to Climate Change: A Deep Dive into Major Capitalistic Perspectives on Green Cover and Climate Change

In the quest to understand and combat climate change, the intersection of capitalism and environmentalism has become a focal point of discussion. Bill Gates, a prominent figure in both the tech and philanthropic spheres, has contributed valuable insights through his writings on climate change. Additionally, examining the major capitalistic perspectives on green cover and climate change provides a comprehensive understanding of the challenges and opportunities in addressing this global crisis.

Bill Gates' Books on Climate Change:

- 1. "How to Avoid a Climate Disaster: The Solutions We Have and the Breakthroughs We Need" (2021):** In his most recent book, Gates presents a pragmatic roadmap for averting a climate catastrophe. Through rigorous research and analysis, he emphasizes the urgency of reducing greenhouse gas emissions and achieving carbon neutrality. Gates outlines a comprehensive strategy that combines scaling up existing technologies with investing in breakthrough innovations to address the complexities of climate change effectively.
- 2. "Climate Change and the Green Revolution: A Pragmatic Approach to Solving the World's Problems" (2017):** In this earlier work, Gates explores the potential of technological innovation and sustainable practices to mitigate the impacts of climate change while addressing broader societal challenges. He advocates for increased investment in agricultural innovation and renewable energy, emphasizing the importance of collaboration between governments, businesses, and civil society in driving sustainable development and climate resilience.

Capitalistic Perspectives on Green Cover and Climate Change:

1. Profit-driven Solutions: One major capitalistic perspective on climate change revolves around the idea of harnessing market forces to drive environmental solutions. Proponents argue that by incentivizing businesses to adopt sustainable practices through financial rewards and penalties, capitalism can spur innovation and investment in clean technologies. Initiatives such as carbon pricing, emissions trading schemes, and green bonds exemplify this approach, aiming to align profit motives with environmental goals.

2. Corporate Social Responsibility (CSR): Many corporations have embraced CSR as a means of addressing environmental concerns while maintaining profitability. By integrating sustainability into their business models, companies can enhance brand reputation, attract environmentally conscious consumers, and reduce operational costs through resource efficiency measures. However, critics caution that CSR initiatives may prioritize superficial gestures over substantive change, leading to "greenwashing" and perpetuating unsustainable practices.

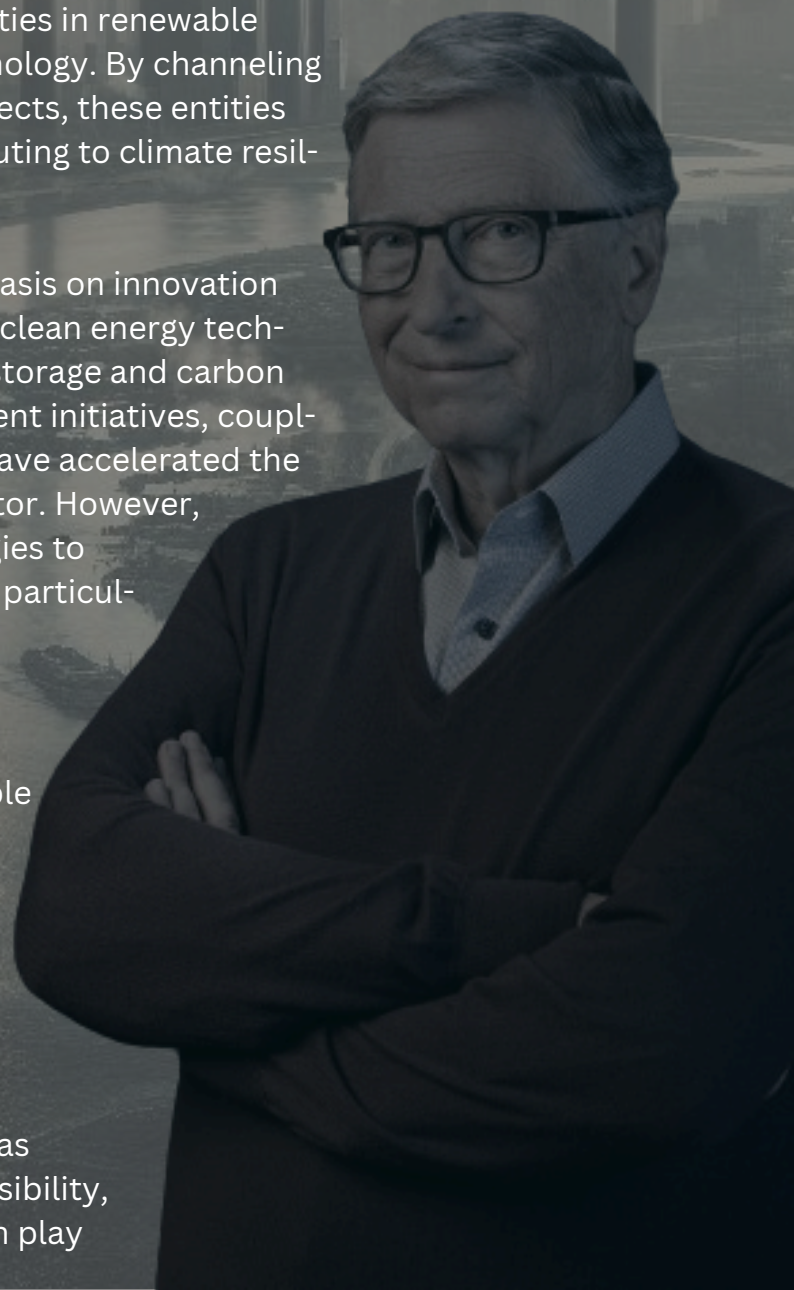
3. Green Investment and Entrepreneurship: Another capitalistic perspective on climate change centers on the potential for green investment and entrepreneurship to drive economic growth while mitigating environmental degradation. Venture capital firms, impact investors, and green startups are capitalizing on emerging opportunities in renewable energy, sustainable agriculture, and clean technology. By channeling capital towards environmentally beneficial projects, these entities seek to generate financial returns while contributing to climate resilience and adaptation efforts.

4. Technological Innovation: Capitalism's emphasis on innovation and competition has spurred advancements in clean energy technologies, from solar and wind power to energy storage and carbon capture. Private sector research and development initiatives, coupled with government incentives and subsidies, have accelerated the pace of innovation in the renewable energy sector. However, challenges remain in scaling up these technologies to achieve widespread adoption and affordability, particularly in emerging markets.

Synthesis and Conclusion:

Bill Gates' books on climate change offer valuable insights into the challenges and opportunities inherent in addressing this complex issue. By advocating for pragmatic solutions and leveraging technological innovation, Gates underscores the potential for capitalism to drive meaningful progress towards a sustainable future.

From a capitalistic perspective, initiatives such as profit-driven solutions, corporate social responsibility, green investment, and technological innovation play



pivotal roles in shaping the response to climate change. While capitalism has the potential to incentivize environmental stewardship and foster economic growth, it also faces criticisms for perpetuating unsustainable consumption patterns and exacerbating social inequalities.

Ultimately, addressing climate change requires a multifaceted approach that integrates environmental, social, and economic considerations. By drawing upon the insights of Bill Gates' writings and embracing diverse capitalistic perspectives, society can strive towards a more equitable and sustainable future for generations to come.





Shashwat Choudhary
B.A. (Hon) Economics



Tech Titans

E
C
O

W
a
r
r
i
o
r
s

Initiative by.    

In an age where climate change is a pressing concern, the world looks to innovation and leadership to pave the way for a sustainable future. Among the vanguard of this movement are tech giants Apple, Meta (formerly Facebook), Tesla, and Microsoft, each making significant strides towards reducing their carbon footprint and championing environmental causes.

Let's delve into their individual contributions:

Apple: Pioneering Sustainability

Apple has long been synonymous with innovation, and their commitment to environmental sustainability is no exception. The company has set ambitious goals to reduce its carbon footprint, aiming for net-zero emissions across its entire supply chain by 2030. One of Apple's standout achievements is its transition to 100% renewable energy for all its operations worldwide, including data centers, offices, and retail stores.

Moreover, Apple is at the forefront of recycling initiatives, pioneering the use of recycled materials in its products. Through its "Apple Renew" program, the company encourages customers to return their old devices for recycling, reducing electronic waste and conserving precious resources.



Meta: Harnessing the Power of Connectivity

As the parent company of Facebook, Instagram, WhatsApp, and Oculus, Meta wields immense influence over digital connectivity. Recognizing its responsibility, Meta has committed to reaching net-zero emissions for its global operations and value chain by 2030. Central to this effort is the company's investment in renewable energy sources, with a focus on solar and wind power.

Additionally, Meta is leveraging its platforms to raise awareness about climate change and empower users to take action. Through initiatives like Climate Science Information Centers and Climate Conversations, the company is providing accurate information and fostering dialogue on environmental issues, catalyzing positive change at scale.




The Meta logo, consisting of a blue infinity symbol followed by the word "Meta" in a dark blue sans-serif font, is displayed on a white rounded rectangular background.



Tesla: Revolutionizing Transportation

When it comes to sustainable transportation, Tesla stands as a trailblazer. The electric vehicle (EV) manufacturer, led by visionary entrepreneur Elon Musk, aims to accelerate the world's transition to sustainable energy. Tesla's fleet of EVs has not only redefined the automotive industry but also significantly reduced greenhouse gas emissions associated with traditional combustion engines.

Beyond cars, Tesla is spearheading innovations in renewable energy storage through its Powerwall and Powerpack battery systems. These technologies enable homes, businesses, and even entire communities to harness and store clean energy, reducing reliance on fossil fuels and enhancing grid resilience.



Microsoft: Empowering Climate Solutions

Microsoft, known for its software prowess, has emerged as a key player in the fight against climate change. The company has committed to becoming carbon negative by 2030, meaning it will remove more carbon from the atmosphere than it emits. This ambitious goal is backed by a comprehensive strategy that encompasses not only Microsoft's operations but also its vast network of suppliers and partners.

Moreover, Microsoft is leveraging its cloud computing capabilities to drive sustainability innovations. Projects like AI for Earth harness artificial intelligence to tackle environmental challenges, from biodiversity conservation to climate modeling. By democratizing access to cutting-edge technology, Microsoft is empowering individuals and organizations worldwide to develop and implement effective climate solutions.



ENVIRONMENTALISM

~A Thing on paper nothing practical

The overgrowing nature of environmental concerns since the 20th century has culminated in the form of innumerable environmental treaties ranging from the Kyoto Protocol to the Paris Agreement. This is what Environmentalism has contributed to the world: A wide range of treaties aimed at international cooperation in resolving the ongoing environmental crises. While crucial concepts of "sustainable development" and "principle of common but differentiated responsibilities" have emerged from these conferences, the ground reality of it all suggests something rather peculiar.

After more than 25 UN climate conferences, greenhouse emissions have not decreased but have instead risen by almost 60 percent, underscoring the gravity and characteristics of the crises at hand. Responses to the issues of deforestation, fossil fuels, and ozone layer depletion by these international forums have been lukewarm at best. This, coupled with 2023 being identified by EU scientists as the hottest year globally on record, adds to the paradox.

Instances like these cause one to question the efficacy of these international forums and conferences.

"Are these measures worthwhile"

"Is the money spent on all these conferences worthwhile"

"Do the major nations (and historically the major contributors) even care about the environmental crises?"

Environmentalism as it first began was reactionary to the anthropocentric nature of the Western world. This view saw humans and their needs to be primary and above that of other animals. At the broadest level, it can be argued that the anthropocentric attitudes of the West can be traced to the Christian value system prevalent at the time wherein humans were given dominion over the earth and its resources. The first task of environmentalism involved doing away with the Christian structure and incorporating Eastern thinking of individual-nature unity into its practices. Thus began the era of academics and environmentally conscious individuals campaigning for eco-friendly ways of life and pressuring states and international forums to come up with adequate legislation to tackle the same.

International agencies like UNEP and UNFCCC began holding conferences aimed at a constructive international response to the climate crises and came up with genuinely creative conventions and treaties.

However, as someone wise once said "Theory will only take you so far," and so did all the bulky theoretical paperwork meet the wrath of the complex socio-political reality and the reality of our human nature. In practice and implementation, these measures lacked efficacy some even worsening the condition, for instance, reducing access to cheap energy drove the local communities to resort to wood and charcoal burning to get their cooking needs fulfilled, thus tarnishing the environment even more.

As a result the current state of the environment as it stands is that grasslands have been overgrazed, natural forests have depleted at an even higher rate, and greenhouse emissions continue to be a major threat. While some small-scale measures have proved successful, the broader reality is that our environment is deteriorating.

These shortcomings prompt a deeper exploration into the underlying factors contributing to the gap between environmental ideals and practical outcomes.

History moves in a line and as one way of living replaces the other it is heavily difficult to move back to the previous way of life. Humans today live in an energy and resource-dependent environment. In such a context, the romanticization of our pre-industrial living patterns and the gospel of eco-friendly ways of consuming less energy, afforestation, and less reliance on personal vehicles lacks the persuasive tendency.

The basic tendency of human nature is that they are good short-term decision-makers and lousy long-term decision-makers. In Psychology, it is termed temporal discounting which refers to the tendency to prioritize immediate gratification over long-term benefits.

Considering the average human, it seems unlikely that we'll revert to our traditional eco-friendly way of life when the alternative (using electricity and personal vehicles) seems much more convenient. Thus these tactics of environmentalism may work for a handful of environmentally conscious individuals, however, their success at the societal level is a mere utopia at best, as has been shown historically. What has been lacking in all the conventions is a basic understanding of human nature. Furthermore, the abstract and theoretical nature of environmentalism is making people even more distant from the issue. This is corroborated by our psychology of risk perception being at play, with these concerns appearing as distant, impersonal, and less immediate than our concerns and struggles.

This bottom-up way of approaching the crises shows how a bundle of individuals with their basic tendencies when coupled together fail to bring the effective measures required for change and when a layer of political considerations is added with each state acting in its selfish interests it's plausible to assume that this myriad of events further the claim that environmentalism is a thing on paper and nothing practical.

In conclusion, environmental efforts require amends to its ways of operation inculcating in its approach the socio-political and psychological context in which these conventions and sustainable approaches are advanced. For instance, international communities can come together and ensure that the shift to green energy is much more convenient (in line with our tendency for temporal discounting). This is the reformation required by humanity rather than adding on to loads of paperwork that operate in a vacuum.

Microplastic: The Cost of Deducting the Cost



Plastic and microplastic (MP) pollution is a concurrent and ever incrementing global problem in the present world, where GDP's are seen climbing the graph's and the hunger to expand trade to more significant counting currency, the biodiversity of our lands and particularly water bodies are being exhausted and exploited as they face a harsh friction in trying to cope with the demands of its inhabitants. These polymers have become indispensable in modern life because of their properties like low manufacturing cost, adaptability, water-resistant nature, high strength-to-weight ratio and high thermal and electrical insulation properties, and are prevalent in almost every area like clothing, storage, transportation, packaging and construction, and in consumer goods. Due to the extensive usage of plastics in food packaging industry, the expanse of MPs is gradually dominating in human consumable items. The contamination of sources from where these consumable items are being extracted is also emerging as a cause of concern as it may affect the MP abundance in these items. In 2018, global polymer production resulted in 359 million tons, but only 47.1% of plastic waste was properly disposed of through recycling, landfills, and energy recovery.

The plastic production rate is projected to double in the next two decades.

The reason for the polymer fright is the highly persistent nature of plastics, due to which their degradation occurs at a slower rate and their accumulation at a faster pace. In the present scenario, worldwide prevalence of smaller fraction of plastics, i.e. microplastics (MPs) and nanoplastics (NPs), is gaining significant attention due to their serious environmental consequences.

MPs refer to any piece of plastic smaller than 5 mm to 1 μm in size along its longest dimension and comprise polymers such as polyethylene (PE), polyethylene terephthalate (PET), and polyvinyl chloride (PVC). Depending on the specific sources of origin, MPs can be categorized into primary and secondary MPs,

A) Primary MPs - are the ones that are intentionally manufactured by industrialists and other chemical agencies for use in cosmetics, personal care products, dermal exfoliators, etc.

B) Secondary fraction of MPs - the fragmentation of larger plastic items like fishing gear, food packaging, plastic bottles, synthetic textiles, car tires, paints, and cosmetics.

During, the COVID-19 pandemic, the inadequate usage of plastic items has generated a silent yet massive chaos in the environment. In the review study by de Sousa (2021), it is elaborately discussed how a single-use plastic item like disposable face masks can impose variable levels of problems in our environment. From reports of deaths in organisms like the Magellanic penguin to the generation of hazardous emissions in the environment due to incineration of infected plastic items, these synthetic materials are creating a severe threat for virtually every type of living organism thriving in our environment.

Indian waters and the polymer aftertaste

The annual consumption of plastics in India is approximately 11 kg per capita (CSE 2019), and being a major consumer, it generates approximately 26 million metric tons of plastic wastes annually which are ingested by the inhabiting organisms by mistaking MPs as their food, or sometimes due to their natural metabolism, organisms are exposed to MPs like in filter feeding organisms like planktons, Also due to their increased bioavailability, subsequent changes can occur in the physical, chemical and biological properties of soil which might affect the terrestrial vegetation as well.

Approximately 80% of the total plastic debris in the marine environments are coming from terrestrial sources which are known to be transported by rivers. Approximately 1–3 billion of MPs are estimated to be daily discharged into the Bay of Bengal by the Ganges, Brahmaputra and Meghna rivers.

These micro-sized polymers are widely distributed in world's oceans and seas, ranging from Atlantic to Pacific Ocean and from Caribbean to Mediterranean Sea. Recently, MPs have also been discovered in Arctic sea ice, the Antarctic, remote mountain ranges and deep ocean trenches. The distribution of MPs is quite versatile in the global marine systems, and their presence has been seen prominently in the benthic, pelagic and shoreline sections of these environments.

With this ongoing scenario of plastic debris mismanagement, it has been predicted that by the year 2050, there will be a greater number of MPs in our oceans than the total number of fishes.

Among the spectrum of threats that marine organisms are facing, MPs are emerging as a new and relatively less studied threat. The present understanding of MP prevalence in the marine biota suggests that a significant proportion of organisms are at risk of ingesting these synthetic polymers which can lead to variable levels of health complications. Studies have found that due to the increasing exposure to MPs, marine biota can experience oxidative stress, reduction in filtration capacity, inflammation in tissues, impaired digestive tract, pseudo-satiation and reduced immunity . Different shapes of MPs may behave differently in water bodies, with fibers and foams potentially floating and fragments possibly sinking to the bottom. The shape of MPs can also affect their impact on biota, with coarse fragments potentially damaging the digestive system of fish, while nanoparticles may translocate to organs .

Conclusion

The purpose for the paragraph above were to shine a spotlight on the matters not highlighted by media and TV channels . India being one of the major producers of plastic waste is gradually amping up its research in microplastics. At present, the role of India in global MP pollution is not well understood , due to lack of solid research and girthy scientific evidence on the matter , the threat will always be loosely interpreted . The toxicity associated with these MPs has not been extensively focussed, and at present, the situation of MP prevalence in Indian food and beverage items is not very clear. The exploration of mechanisms involved in MP-associated toxicity to humans as well as other organisms is a very important aspect to be looked upon, considering the role of plastic items in our day-to-day lives.

LAKSHYA CHETTRI
B.A.(HONS.) PHILOSOPHY

The Green Dichotomy: Talking about Green Cover While Continuously Deforesting

In recent years, there has been a growing global conversation about the importance of increasing green cover on Earth. Governments, organizations, and individuals alike have been vocal about the necessity of planting trees, restoring ecosystems, and combatting climate change. Yet, amidst this rhetoric of environmental stewardship, a stark and troubling reality persists: the ongoing and often escalating rate of deforestation across the globe.

According to data from Global Forest Watch, the world lost 10.3 million hectares of tree cover in 2020 alone, equivalent to the combined land area of the United Kingdom and Greece. While some regions have made progress in reforestation efforts, such as parts of Europe and North America, deforestation continues to ravage vast swaths of tropical forests in the Amazon, Congo Basin, and Southeast Asia.

The paradoxical coexistence of discussions on expanding green cover and the relentless destruction of forests underscores a troubling disconnect between words and actions. While nations may publicly pledge to adhere to green cover and plantation protocols, their actual implementation often falls short. This dissonance raises critical questions about the sincerity of commitments to environmental conservation and the effectiveness of current strategies.



One major contributing factor to this green dichotomy is the clash between economic interests and environmental preservation. Many nations face the challenge of balancing the need for economic development with the imperative to protect natural resources. Industries such as logging, agriculture, and mining often drive deforestation as governments prioritize short-term gains over long-term sustainability. In this pursuit of economic growth, environmental concerns are frequently sidelined or sacrificed.

Moreover, the global nature of deforestation means that efforts to address it require international cooperation and coordination. While some countries may enact stringent environmental regulations, others may lag behind, creating imbalances and loopholes that undermine collective efforts to combat deforestation. Additionally, the demand for commodities sourced from deforested areas, such as palm oil, soy, and timber, fuels a cycle of destruction driven by global markets.

Addressing the green dichotomy requires a multifaceted approach that goes beyond mere rhetoric and symbolic gestures. It necessitates concrete actions and policies that prioritize environmental conservation alongside economic development. This includes strengthening enforcement mechanisms to ensure compliance with existing regulations, incentivizing sustainable land use practices, and promoting alternative livelihoods that do not rely on deforestation.

Furthermore, raising awareness and fostering a sense of collective responsibility are crucial in mobilizing support for conservation efforts. Education campaigns, community engagement initiatives, and partnerships between governments, businesses, and civil society can help galvanize action at all levels. By fostering a deeper understanding of the interconnectedness of environmental health and human well-being, societies can begin to shift towards more sustainable practices. Ultimately, bridging the gap between talk and action on increasing green cover requires a fundamental shift in priorities and values. It demands a commitment to stewardship of the planet for future generations and recognition of the inherent worth of nature beyond its instrumental value to humans. Only through genuine collaboration, innovation, and dedication can we hope to reconcile the green dichotomy and forge a path towards a truly green and sustainable future.

Role of Global Diplomacy in Addressing Environmental Challenges

Global diplomacy plays a pivotal role in addressing environmental challenges, as nations collaborate to tackle issues that transcend borders. The implications of diplomatic efforts extend across various environmental domains, from climate change mitigation to biodiversity conservation and sustainable development. Here's a detailed exploration of how global diplomacy influences environmental outcomes:

1. **Climate Change Mitigation:** At the forefront of environmental diplomacy is the negotiation and implementation of agreements aimed at combating climate change. The Paris Agreement, forged in 2015 under the United Nations Framework Convention on Climate Change (UNFCCC), stands as a landmark diplomatic achievement. It sets targets for reducing greenhouse gas emissions, promotes international cooperation on adaptation efforts, and mobilizes financial resources for climate action. Diplomatic efforts continue to be crucial in enhancing the ambition of national climate pledges and ensuring their effective implementation.

2. **Biodiversity Conservation:** Diplomatic initiatives are instrumental in preserving biodiversity and safeguarding ecosystems worldwide. Multilateral environmental agreements like the Convention on Biological Diversity (CBD) facilitate cooperation among nations to conserve and sustainably manage biodiversity. Diplomatic negotiations seek to establish protected areas, regulate trade in endangered species, and promote sustainable practices in sectors such as agriculture and forestry. Furthermore, diplomatic engagements raise awareness about the value of biodiversity and foster partnerships for its conservation at local, regional, and global scales.



3. Sustainable Development Goals (SDGs): The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, represents a comprehensive diplomatic effort to address interconnected environmental, social, and economic challenges. The SDGs encompass environmental objectives, such as clean energy access (SDG 7), sustainable cities (SDG 11), and responsible consumption and production (SDG 12). Global diplomacy plays a vital role in advancing these goals by fostering international cooperation, mobilizing resources, and promoting policy coherence across sectors.

4. Transboundary Pollution and Environmental Hazards: Diplomatic channels are essential for addressing transboundary pollution and environmental hazards that pose risks to human health and ecosystems. Agreements and protocols are negotiated to prevent and respond to pollution incidents, manage hazardous substances, and promote environmental emergency preparedness. Additionally, diplomatic efforts seek to strengthen international cooperation in monitoring and enforcing environmental standards to mitigate the adverse impacts of pollution on air, water, and soil quality.

5. Technology Transfer and Capacity Building: Diplomatic engagements facilitate the transfer of environmentally sound technologies and expertise to developing countries, enabling them to leapfrog towards sustainable development pathways. Through international cooperation and partnerships, nations collaborate on research and innovation, capacity building, and technology transfer initiatives aimed at enhancing resilience to climate change, promoting renewable energy deployment, and fostering sustainable practices in various sectors.

6. Environmental Justice and Equity: Diplomatic discussions increasingly emphasize the principles of environmental justice and equity, recognizing the disproportionate impacts of environmental degradation on vulnerable communities and marginalized groups. Diplomatic efforts seek to address these disparities by promoting inclusive decision-making processes, supporting community-led initiatives, and integrating environmental considerations into broader development agendas.

In conclusion, global diplomacy plays a central role in shaping environmental policies, forging international agreements, and mobilizing collective action to address pressing environmental challenges. By fostering collaboration, promoting dialogue, and advancing common interests, diplomatic efforts contribute to the pursuit of a more sustainable and resilient future for all nations and generations.

By Vinayak Nandi
B.A.Psychology Hons



WHISPERS OF THE WIND

Ankit Mishra
B.A. (Programme)

In the whispers of the wind, a plea is softly spoken,
For the guardians of the earth, to heal what has been broken.

The rivers sing in chorus, their melody so clear,
" Preserve our ancient lifelines, for all there is to revere. "

The forests stand in silence, their wisdom old and deep,
Reminding us of promises, we have yet to keep.
Their leaves like hands in prayer, towards the sky they reach,
Urging us to learn the lessons, that only trees can teach.

The mountains, proud and stoic, bear witness to our deeds,
A testament to time, and to our earthly needs.

Their peaks touch the heavens, in a silent, sacred vow,
To stand as firm protectors, though we forsake them now.

The creatures of the wild, with eyes so full of knowing,
Watch as their homes vanish, with humanity's growing.
They ask for nothing but the chance, to live as they were meant,
In harmony with nature, not as its detriment.

So let us rise together, for the earth that gives us life,
To end the age of taking, and quell the rising strife.
With every act of kindness, with every choice we make,
We write the future's story, for our children 's sake.

For in the whispers of the wind, if you listen, you will find,
The earth speaks to all of us, its fate and ours entwined.
Let's honor its eternal call, with actions bold and true,
For the love of our planet, so blue, so green, so new.

Plastic Peril: Unwelcome Pollution in Earth's Deepest Abyss

The Mariana Trench, Earth's deepest oceanic abyss, has become an unlikely host to an unwelcome phenomenon: plastic pollution. The discovery of plastic waste, including a plastic bag at depths of nearly 11,000 meters, is a stark indicator of the severity and pervasiveness of oceanic plastic contamination. Plastics have permeated through the most remote and deepest parts of our oceans, affecting marine ecosystems and biodiversity. The infiltration of plastics into these secluded environments is a testament to the far-reaching consequences of human consumption and waste disposal practices.

The presence of plastics at extreme depths reveals the extent to which human activities impact even the least accessible regions of the planet. The Deep-Sea Debris Database, which cataloged the plastic bag in the Mariana Trench, serves as a grim archive of human-made materials accumulating in the ocean's darkest recesses.

The presence of plastics at extreme depths reveals the extent to which human activities impact even the least accessible regions of the planet. The Deep-Sea Debris Database, which cataloged the plastic bag in the Mariana Trench, serves as a grim archive of human-made materials accumulating in the ocean's darkest recesses. Plastic debris poses threats to marine life through ingestion and entanglement, disrupting food chains and habitats. The resilience of plastics, with their slow degradation rate, means that they can persist in the marine environment for centuries, posing long-term risks to marine species and ecosystems.

This issue necessitates a concerted global effort to reduce plastic waste, enhance recycling, and develop biodegradable alternatives. International agreements and policies must be strengthened to address the sources of plastic pollution and promote sustainable practices. To mitigate the impact of plastics in the deep ocean, several strategies must be implemented: Limiting the production of single-use plastics and encouraging the use of sustainable materials can significantly decrease the amount of plastic waste entering the oceans. Enhancing waste management infrastructure, particularly in regions where plastic waste is most likely to enter the ocean, is crucial for preventing pollution.

Educating the public about the consequences of plastic pollution and the importance of leading to behavioral changes that benefit the environment. Supporting the development of technologies designed to remove plastics from the ocean, such as ocean cleanup arrays and devices that capture microplastics, is essential for addressing existing pollution. Continued research into the effects of plastic pollution on marine life and ecosystems, as well as monitoring the distribution and movement of plastics in the ocean, will inform future conservation efforts.

The challenge of plastic pollution in the deep ocean is daunting, but it is not impossible to deal with. Through reducing plastic use can international collaboration, technological innovation, and public engagement, we can tackle this issue head-on. The future of our oceans depends on our actions today. We shall unite in our efforts to ensure that the deep sea, and all its inhabitants, are protected from the scourge of plastic pollution.

By expanding on the initial points and exploring the broader implications of plastic pollution in the deep ocean, we gain a more comprehensive understanding of the issue and the collective effort required to address it. The sustainability of marine environments hinges on our ability to manage and mitigate the risks posed by plastic debris, ensuring a safe and clean habitat for current and future marine life.

A World Unveiled: The Majesty of 'Our Planet'

"Our Planet," a documentary produced by Netflix in collaboration with the World Wide Fund for Nature, or WWF (a Swiss-based international non-governmental organisation), is a visually compelling and thought-provoking exploration of Earth's natural wonders and the critical need for environmental conservation. Through magnificent photography, gripping storytelling, and a wealth of scientific knowledge, the series provides a meaningful and current meditation on the state of our world and humanity's impact on its ecosystems.

One of the documentary's greatest strengths lies in its breathtaking visuals. From sweeping landscapes to intimate close-ups of wildlife, each frame is a testament to the beauty and diversity of life on Earth. The cinematography expertly captures the intricacies of natural ecosystems, allowing viewers to witness the wonders of the natural world in stunning detail.

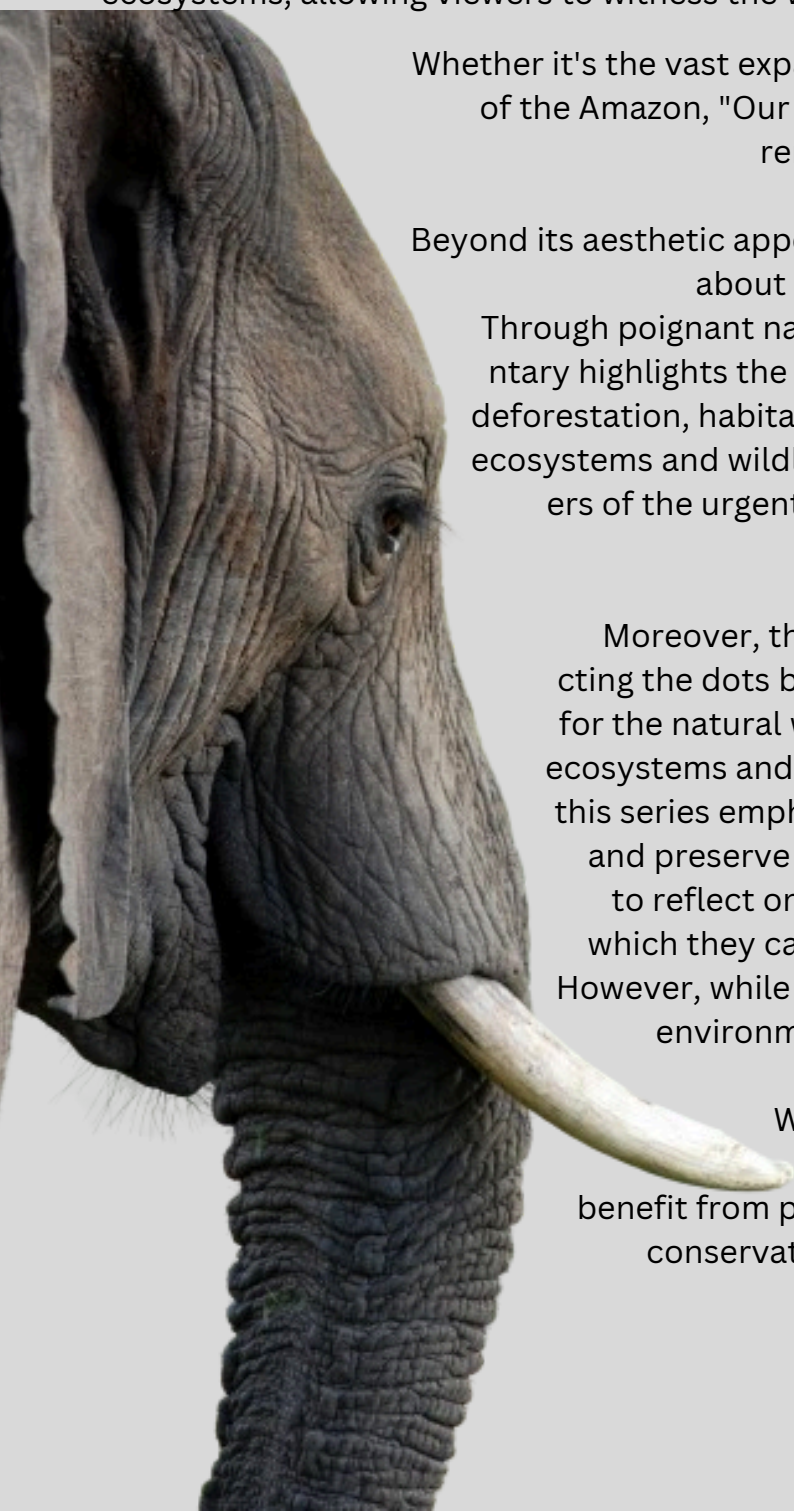
Whether it's the vast expanse of the Arctic tundra or the lush rainforests of the Amazon, "Our Planet" transports viewers to some of the most remote and awe-inspiring locations on the planet.

Beyond its aesthetic appeal, this series also delivers a powerful message about the importance of environmental conservation.

Through poignant narratives and compelling statistics, the documentary highlights the devastating impact of human activities such as deforestation, habitat destruction, climate change, and pollution on ecosystems and wildlife. It serves as a wake-up call, reminding viewers of the urgent need to address these pressing environmental issues before it's too late.

Moreover, the documentary does an excellent job of connecting the dots between human actions and their consequences for the natural world. By illustrating the interconnectedness of ecosystems and the delicate balance that sustains life on Earth, this series emphasises the need for collective action to protect and preserve our planet's biodiversity. It encourages viewers to reflect on their own behaviours and consider the ways in which they can contribute to positive environmental change. However, while "Our Planet" excels in its visual storytelling and environmental messaging, some critics have pointed out its limited focus on solutions and action plans.

While the documentary effectively highlights the challenges facing our planet, it could perhaps benefit from providing more concrete examples of successful conservation efforts and practical steps that viewers can take to make a difference.



WHISPERS OF REGRET



In the ruins of forgotten dreams,
Where echoes of laughter once gleamed,
I wander alone, through corridors of pain,
Haunted by shadows, soaked in rain.
The whispers of regret, they echo loud,
As I walk amongst the shattered crowd.
Each step a reminder of paths untrod,
Of opportunities lost, of faith unshod.
In the silence of my own demise,
I hear the echo of silent cries.
For in this desolate, barren land, Hope is but a fleeting strand.
Yet still, I journey through the night, Seeking solace in the fading light

The whispers of regret,
they echo loud,
As I walk amongst the shattered crowd.
Each step a reminder of paths untrod,
Of opportunities lost, of faith unshod.
In the silence of my own demise, I hear the echo of silent cries.
For in this desolate, barren land, Hope is but a fleeting strand.
Yet still, I journey through the night, Seeking solace in the fading light.

Priyanshu Jha
B.Sc. Physical Sciences

RES PUBLICA OVER GREEN COVER: NURTURING NATURE FOR A SUSTAINABLE FUTURE

In the realm of environmental conservation, the imperative to preserve green spaces has never been more critical. The Latin phrase “Res Publica,” meaning “public affair” or “commonwealth,” underscores the shared responsibility we hold towards safeguarding our natural habitats. The preservation of green cover is not merely a matter of ecological concern; it is an ethical obligation we owe to future generations. In this article, we delve into the significance of conserving natural habitats, explore its effects, and advocate for a collective commitment to nurturing our planet.

The term "green cover" encapsulates the diverse array of vegetation that blankets our landscapes, including forests, grasslands, wetlands, and mangroves. These ecosystems serve as the lifeblood of our planet, providing essential services such as oxygen production, carbon sequestration, water purification, and biodiversity conservation. Yet, despite their invaluable contributions, green spaces continue to face relentless encroachment and degradation due to urbanization, industrialization, deforestation, and climate change.

One of the most pressing reasons to conserve green cover is its pivotal role in mitigating climate change. Forests, for instance, act as carbon sinks, absorbing vast amounts of carbon dioxide from the atmosphere and helping to regulate global temperatures. By preserving and restoring forests, we can curb the pace of climate change and safeguard vulnerable communities from its adverse impacts, such as extreme weather events, rising sea levels, and loss of agricultural productivity.

Furthermore, green spaces play a crucial role in supporting biodiversity, serving as habitats for countless species of plants, animals, and microorganisms. The loss of these habitats not only threatens individual species but also disrupts entire ecosystems, leading to cascading effects on ecosystem services and human well-being. Protecting natural habitats is therefore essential for maintaining the resilience and integrity of Earth’s interconnected web of life.



Moreover, green spaces offer a myriad of socio-economic benefits to communities around the world. They provide recreational opportunities for outdoor activities such as hiking, camping, birdwatching, and photography, promoting physical and mental well-being among individuals. Additionally, green spaces enhance property values, attract tourism, and create employment opportunities in sectors such as eco-tourism, forestry, and sustainable agriculture.

Despite these compelling arguments for conservation, the rapid pace of urbanization and industrial development continues to pose formidable challenges to green cover worldwide. In many regions, forests are being cleared at an alarming rate to make way for agriculture, infrastructure projects, and urban expansion. Wetlands are drained for urban development, depriving communities of vital flood control and water purification services. Grasslands are degraded through overgrazing and land conversion, leading to soil erosion and desertification.

To reverse these trends, concerted efforts are needed at local, national, and global levels. Governments must enact and enforce robust environmental policies and regulations to protect natural habitats from exploitation and degradation. International agreements such as the Paris Agreement and the Convention on Biological Diversity provide frameworks for collective action on climate change and biodiversity conservation, but they must be backed by concrete measures and commitments from all stakeholders.

Furthermore, public awareness and education are key drivers of change in fostering a culture of environmental stewardship and sustainability. By raising awareness about the importance of green cover and its myriad benefits, we can empower individuals and communities to take action in their own capacities, whether through tree planting initiatives, wildlife conservation projects, or sustainable land management practices.

On a personal note, I believe that the conservation of natural habitats is not just a matter of ecological preservation but also a moral imperative. As stewards of this planet, we have a duty to protect and nurture its rich tapestry of life for the sake of future generations. Every tree planted, every wetland restored, and every species saved represents a small but meaningful step towards building a more sustainable and equitable world for all.

In conclusion, Res Publica Over Green Cover underscores the shared responsibility we hold towards preserving our planet's natural habitats. By conserving green spaces, we can mitigate climate change, safeguard biodiversity, and enhance the well-being of present and future generations. It is imperative that we prioritize environmental conservation in our policies, practices, and everyday actions, recognizing that our collective future depends on the health and vitality of our natural world. Let us come together as stewards of Res Publica and work towards a greener, more sustainable future for all.

Priyanshu Jha
B.Sc. Physical Sciences



SPACE

WASTE

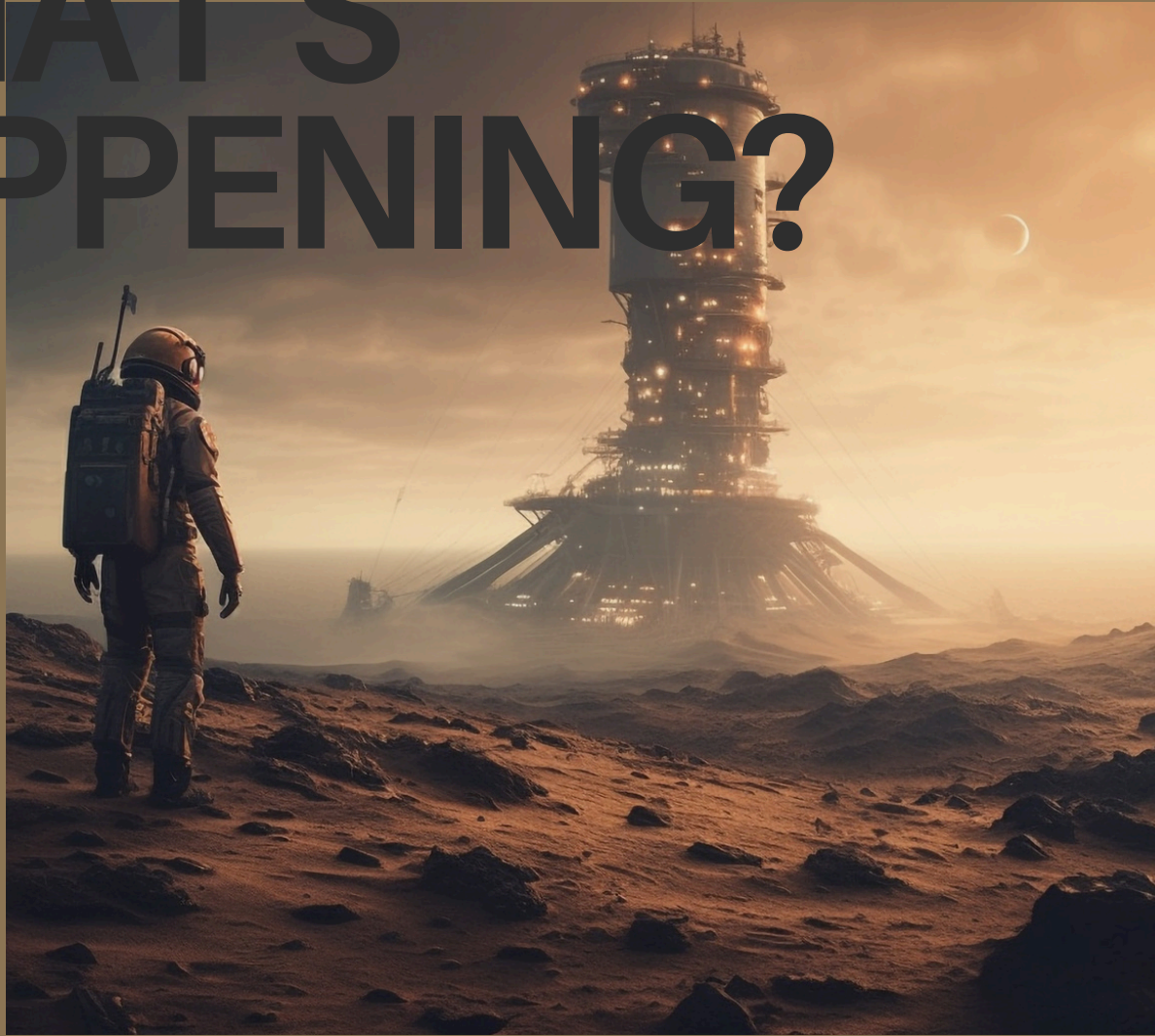
**“Beyond the Blue: The Silent
Crisis of Space Waste”**

Beyond the Blue: The Silent Crisis of Space Waste”

As our ambitions soar beyond the stratosphere, our legacy in the low Earth orbit tells a different story—a tale of clutter and carelessness. The issue of space debris, also known as space waste, has escalated into a pressing concern for global space agencies and environmentalists alike.



WHAT'S HAPPENING?



With the advent of satellite constellations and the remnants of past missions, the cosmos is no longer the pristine void we once imagined. Space debris encompasses a range of discarded objects, from defunct satellites to fragments of metal left by collisions or anti-satellite tests. These objects, which are millions in number, pose a significant risk to operational satellites, the International Space Station, and future space missions. Traveling at velocities upwards of 17,500 mph, even a small piece of debris can inflict catastrophic damage upon impact. The proliferation of satellites for communication, navigation, and Earth observation has been a double-edged sword.

While they've revolutionized our way of life, the end-of-mission protocols for these satellites often leave them as spaceborne hazards. As our ambitions soar beyond the stratosphere, our legacy in the low Earth orbit tells a different story—a tale of clutter and carelessness. The issue of space debris, also known as space waste, has escalated into a pressing concern for global space agencies and environmentalists alike. As our ambitions soar beyond the stratosphere, our legacy in the low Earth orbit tells a different story—a tale of clutter and carelessness. The issue of space debris, also known as space waste, has escalated into a pressing concern for global space agencies and environmentalists alike.

Diving into detail

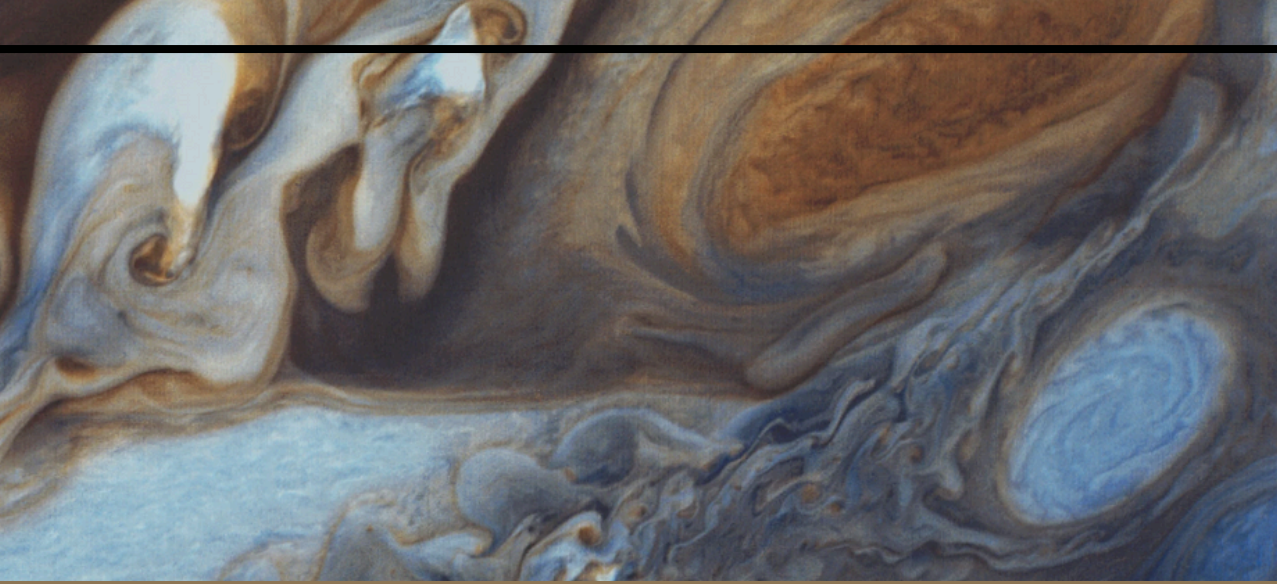


As we stand at the crossroads of space exploration and environmental stewardship, the path forward is clear. We must embrace a future where space activities are conducted with a conscientious regard for the heavenly environment. This entails not only technological innovation in debris removal but also a paradigm shift in how we approach space missions—from launch to decommission.

In conclusion, the issue of space debris is a stark reminder of our responsibility as a space-faring civilization. It is imperative that we act now to ensure the sustainability of our final frontier, for the sake of current and future generations. The cosmos is a shared resource, and it is incumbent upon us to preserve its sanctity. The conversation around space debris often revolves around the immediate operational risks to spacecraft and satellites. However, the implications of this issue are far-reaching, affecting aspects of space law, international relations, and even the long-term habitability of Earth's orbit.

The Outer Space Treaty of 1967 laid the foundational legal framework for space activities, including the principle that space shall be free for exploration and use by all countries. However, the treaty does not specifically address the issue of space debris. As the orbital environment becomes increasingly congested, there is a growing need for comprehensive legal mechanisms that hold parties accountable for the debris they generate and mandate active debris removal.

Space debris is a global issue that requires international co-operation. The mitigation and management of space debris cannot be achieved by any single nation alone. It necessitates a collaborative approach, with space-faring nations sharing data, technology, and resources. However, this also raises potential tensions, as geopolitical rivalries extend into space. The establishment of trust and mutual understanding is crucial to prevent space debris from becoming a source of conflict.



Initiatives that are taken

Several initiatives are underway to tackle the problem of space debris. These range from nets and harpoons to capture debris, to more advanced concepts like using lasers to alter the trajectory of debris, causing it to de-orbit. The success of these technologies will depend on rigorous testing, international regulatory approval, and the willingness of the space industry to invest in debris removal as a necessary cost of doing business in space.

Public awareness of the space debris issue is relatively low, despite its importance. Educational campaigns and outreach programs are essential to inform the public about the risks associated with space debris and the need for sustainable space practices. By engaging with the public, policymakers, and industry leaders, we can foster a culture of responsibility that prioritizes the long-term preservation of our space environment.

Several initiatives are underway to tackle the problem of space debris. These range from nets and harpoons to capture debris, to more advanced concepts like using lasers to alter the trajectory of debris, causing it to de-orbit. The success of these technologies will depend on rigorous testing, international regulatory approval, and the willingness of the space industry to invest in debris removal as a necessary cost of doing business in space.

"It has been said that astronomy is a humbling and character-building experience. There is perhaps no better demonstration of the folly of human conceits than this distant image of our tiny world. To me, it underscores our responsibility to deal more kindly with one another, and to preserve and cherish the pale blue dot, the only home we've ever known."

Ankit Mishra BA Programme (History+Philosophy)
And
Bharat Gautam BA Programme (English+Pol sc)



A hand holding a camera lens against a blurred background. A rainbow light leak is visible on the left side of the lens. The word 'Art' is written in a stylized, colorful font across the top of the lens.

A r t

and

LENS



By Rishabh Yadav



DEMON
EDIYS

By Rishabh Yadav

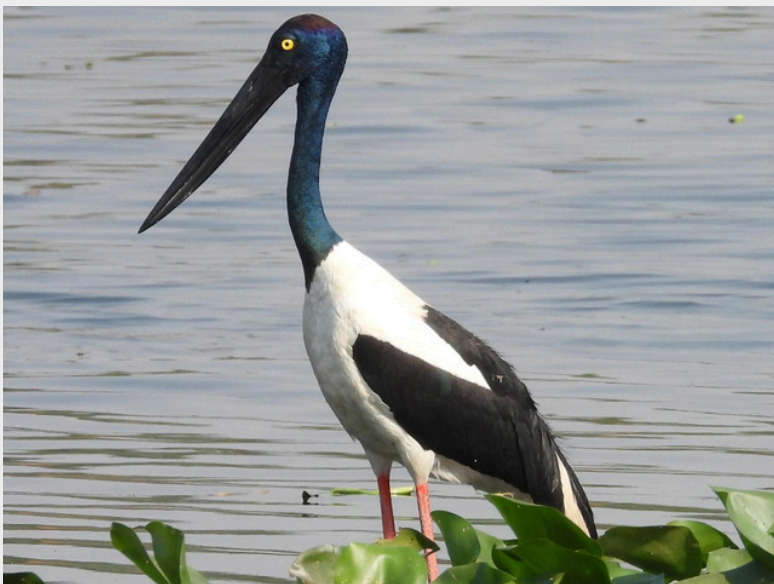


By Rishabh Yadav



By Rishabh Yadav









THE REWIND

Honeybee Workshop

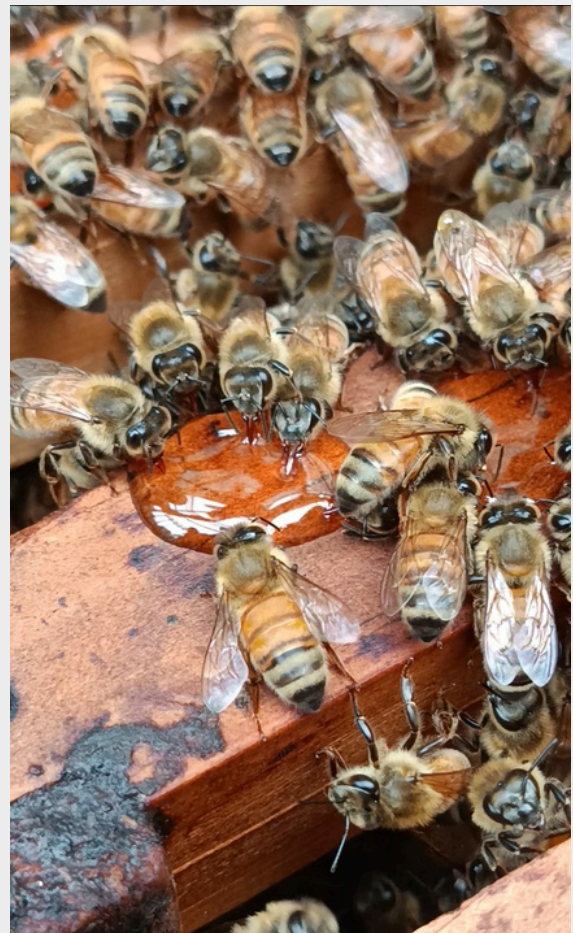
Date – 2.11.2023

The morning was foggy, and the surroundings green. The birds chirped while landing on the trees, making the leaves fall, landing on the dewy grass below. The Honeybee Workshop organised in Sunder Nursery was something to behold. Organised and conducted by the Golden Hive Foundation, working towards creating awareness, imparting training and culminating innovation in the minds of the people on the vast subject of nature's most efficient pollinators- Bees.

Students from Aranya Society of Zakir Husain Delhi College, on 2nd of November, 2023 (Thursday), attended this workshop conducted by Mr Rakesh Gupta, where they were accompanied by A faculty member, Dr. DevenderMudgil. Here, they gained a myriad of knowledge about how these small yet integral part of the environment carry out such complex activities and processes that had been previously impossible to imagine. The Insight they gained into this world of Bees, and Honey Bees in particular, opened the students to the culture of Bee Keeping and how these small insects work hard to produce the sweet nectar that is full of medicinal properties and nutrients – honey.

The workshop began with Honey Tasting, where the students tasted the sweet substance in it's purest form. This was followed by an introductory session to beekeeping and honey production. The students also got a chance to check out a bee box where they feed some honey to bees, and got a chance to interact with these marvellous hardworking creatures!

We at Zakir are really grateful to The Golden Hive Foundation for providing us with this one of a kind experience and to open to us the world of Bees!



Plantation Drive

Date - 3/3/24

“Planting trees is a gift to the Earth, a promise of life and breath for the future.”

Aranya- The Nature and Environment Society under the aegis of IQAC and VIKSIT BHARAT, participated in a plantation drive organized by Saksham Bhoomi Foundation and Neem Team on the 3rd of March at Welcome Jheel. Welcome Jheel, situated near Welcome Metro Station, was a serene oasis in the bustling heart of Delhi. This picturesque lake offered a tranquil escape, surrounded by lush greenery and vibrant flora. Welcoming locals and visitors alike, it provided a peaceful retreat, perfect for leisurely strolls and moments of quiet reflection.

Due to rapid urbanization in the name of sustainable development, over 70% of wetlands in Delhi-NCR, including Welcome Jheel, have disappeared or degraded. Until a few years ago, there was water in the lake. However, garbage started being dumped in it due to encroachments and the emergence of illegal settlements, resulting in the demise of the lake and exacerbating the degradation of this once-thriving ecosystem.

The plantation drive was a small effort undertaken by nature enthusiasts to revive this once-existing serene oasis. We arrived at the location at 9:30 a.m. The session commenced with a brief lecture by Mohit Sir (Founder and Director of Saksham Bhoomi Foundation), highlighting the importance of nature and the steps we should take to preserve it. Following this, a cleanliness drive was conducted to tidy up the site. Subsequently, the plantation drive began, during which we planted 10 trees. We collectively pledged to repeat this activity regularly at the site, aiming for a complete makeover within the next 3-4 months.

We the students of Aranya, express our sincere gratitude to Saksham Bhoomi Foundation and Neem Team for orchestrating this impactful initiative.



Sanjay Van Nature Walk

Date - 20/12/23

Sanjay Van - The sprawling city forest area near Vasant Kunj is certainly a piece of peace in this city engrossed in all kinds of pollution. On 20th of December, the members of Aranya, the nature and Environment Society of Zakir Husain Delhi College explored this place which is a paradise of bird watchers and nature lovers. With eyes closed, the participants breathed in fresh air scented with the fragrance of flora.

Apart from its heritage, the area is one of the few recluses for bird watchers and nature enthusiasts. Resident or visiting birds include the indian peafowl, grey heron, Eurasian golden oriole, purple sunbird, Asian koel, Brahminy starling, Indian silverbill, grey-breasted prinia, crested honey buzzard, white-throated kingfisher, rufous treepie, Indian paradise flycatcher, Eurasian sparrowhawk, red-wattled lapwing, cattle egret, common moorhen, white-breasted waterhen, grey francolin and the Jacobin cuckoo, a migrant from Africa that breeds in this forest.

The forest also conserves natural habitat for the nilgai, golden jackal, snakes and a large variety of butterflies.

To be in the lap of nature helps us feel complete acceptance of ourselves and our being. It soothes our souls which are for most of the time disconnected from nature. It helps us reconnect and become a part of the whole. Those who took part in this nature walk too expressed feeling calm and rejuvenated.

We express gratitude to the park authorities for providing us with the opportunity to explore the lives of these mystical creatures in such an interactive manner.



Sultanpur National Park

Date – 24 February 2024

The field trip to Sultanpur National Park in Delhi offered an enriching experience, allowing students to explore the diverse flora and fauna of the region, providing valuable insights from a student's perspective, which highlights the significance of the park and its impact on the ecosystem.

On the 24th of February, the intrigued group of students from ARANYA(The Nature and Environment Society) of Zakir Husain Delhi College were fortunate enough to explore the natural habitats and take a closer look at some of the pristine avian friends of the nature.

Upon arrival at Sultanpur National Park, we were immediately struck by the serene atmosphere and lush greenery. As we ventured deeper into the park, our group was fortunate to encounter a diverse array of bird species, including migratory birds such as Siberian cranes, painted storks, and Rosy Pelicans. These avian inhabitants not only added to the park's aesthetic appeal but also played a crucial role in maintaining ecological balance.

This momentous occasion was also graced by our convenor, Dr. Ragesh P.R and Mr. Sajid Ali (Lab Attendant in Zoology Dept.)

The presence of such a wide variety of bird species at Sultanpur National Park is indicative of its ecological significance. Birds serve as key indicators of ecosystem health, with their population dynamics reflecting changes in environmental conditions. Additionally, many of the birds found in the park contribute to essential ecological processes such as pollination and seed dispersal, thereby influencing the overall biodiversity of the area.

The experience of witnessing these magnificent creatures in their natural habitat left a profound impression on us. It instilled a deep sense of appreciation for the delicate balance of nature and the importance of conservation efforts. Furthermore, observing the birds' behaviors and interactions served as a reminder of the interconnectedness of all living organisms and the need for humans to coexist harmoniously with the natural world.

We are thankful to the authorities at the park to give us this chance getting to delve deeper into these mystical creatures lives in such interactive manner.



Clean Campus Green Campus

Date - 22 February 2024

"It is our collective and individual responsibility to preserve and tend to the world in which we all live." - Dalai Lama

The need to spread not only awareness but also bring in a shift in the attitude of the masses towards their own natural ecosystem has become the need of the hour. And what better way to spread this cognizance than to engage and collaborate with the Youth of today- the students.

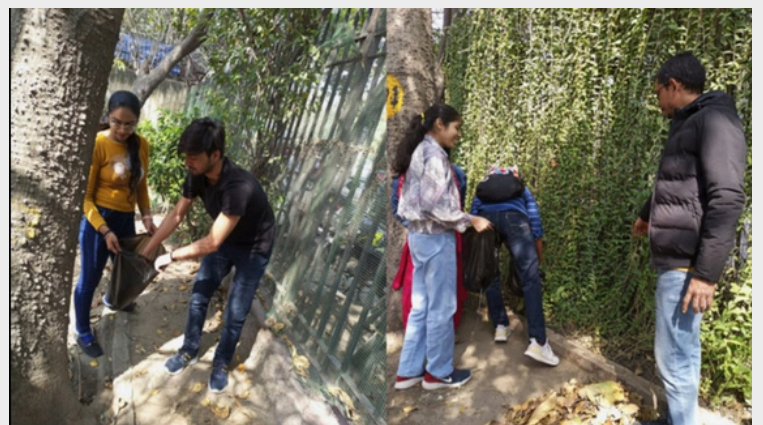
The Nature and Environment Society- 'Aranya' organised a pro-bono workshop and drive in association with the Vivekananda study circle and garden committee with the slogan "Clean Campus Green Campus".

The drive, conducted on the 22nd of February within the college campus aimed to inculcate a sense of cleanliness among the students of the college and build up a sense of environmental responsibility towards their college.

The drive, one hour thirty minutes long, started around 1100 hours. Along with a dedicated contingent of 10 faculty members and 60 students, the goal of the drive was successfully accomplished.

The college premises, including the rose garden, canteen, and ground were cleared off any plastic and paper debris with the combined efforts of environmental change makers. Post the collection of the polluting materials, the waste was responsibly disposed of with the assistance of the Municipality's waste disposal van.

This drive was not just a society event but a conception of an environmentally secure future with the resolve towards a cleaner and greener Earth.



Clean Campus Green Campus

Date - 22 February 2024

"It is our collective and individual responsibility to preserve and tend to the world in which we all live." - Dalai Lama

The need to spread not only awareness but also bring in a shift in the attitude of the masses towards their own natural ecosystem has become the need of the hour. And what better way to spread this cognizance than to engage and collaborate with the Youth of today- the students.

The Nature and Environment Society- 'Aranya' organised a pro-bono workshop and drive in association with the Vivekananda study circle and garden committee with the slogan "Clean Campus Green Campus".

The drive, conducted on the 22nd of February within the college campus aimed to inculcate a sense of cleanliness among the students of the college and build up a sense of environmental responsibility towards their college.

The drive, one hour thirty minutes long, started around 1100 hours. Along with a dedicated contingent of 10 faculty members and 60 students, the goal of the drive was successfully accomplished.

The college premises, including the rose garden, canteen, and ground were cleared off any plastic and paper debris with the combined efforts of environmental change makers. Post the collection of the polluting materials, the waste was responsibly disposed of with the assistance of the Municipality's waste disposal van.

This drive was not just a society event but a conception of an environmentally secure future with the resolve towards a cleaner and greener Earth.



Ganga Utsav

Date – 4.11.2023

The 7th edition of Ganga Utsav organized by National Mission for Clean Ganga, was celebrated with much fervor and enthusiasm at Ambedkar International Centre on 04 NOV 2023. Though the pollution levels in the city lead to many last minute changes in the programme, there was no cap to the spirit. The members of Aranya, the environment society of Zakir Husain Delhi College attended the event.

The event was Inaugurated by Secretary, Department of Water Resources, River development & Ganga Rejuvenation, Ministry of Jal Shakti, Ms. Debashree Mukherjee, in the presence of Special Secretary and Director General, NMCG, Shri G. Asok Kumar. The event also marked the release of the 33rd edition of NamamiGange Magazine, the new Chacha Chaudhary series and the voyage of Ganga Booklet, based on Ganga PustakParikrama in collaboration with NBT. The 2nd edition of Ganga PustakParikrama was also flagged off by Ms. Debashree Mukherjee and Mr. G. Asok Kumar. The speakers emphasized the role of rivers Ganga and Yamuna as the lifelines of our country. Folk dances and the mesmerizing new rendition of the 'NamamiGange' anthem by Mr. JeetParamanik and various other performances complimented the motto of NamamiGange. At last, the event concluded with a captivating performance of fusion music by PanditSiddharta Banerjee. The event was a great effort in reinforcing the idea of saving our rivers and passing on the baton to upcoming generations.

We at Zakir are really grateful to Mr.MohitRlan for providing us with this one of a kind experience.





THE GALLERY



THE CORE TEAM



THE MAGAZINE TEAM