



02 EDITION

We Have The Power Today To Change Tomorrow! A MESSAGE FROM THE FOUNDER

Thank you for prodding me with questions on climate change. As a response, may I take you to the Big History of the planet?

When a huge meteorite hit the Yucatan Peninsula in Mexico, it was bad news for the giant Dinosaurs. The sun was covered by dust, and the plants found it difficult to thrive. Therefore, life was nearly impossible for the plant-eating animals, including Dinosaurs. Naturally, they became extinct. Probably the Earth mother heaved a sigh of relief.

Simultaneously, other animals like elephants, the wooly Mammoths, Lions, Tigers, Hippos, Pythons, and snakes took up the slots left behind by the giant Dinosaurs; they flourished!

The African continent was a flourishing place for life. The climate change brought in extra rains. The deserts like Sahara flourished with tall grasses.

Certain Apes like Homo erectus who lived on the trees, had to come down to the grasslands.

Finding it difficult to walk on four legs and a tail, they eventually learned to balance on two hind legs, seeing that the tails were useless in the new terrain, the genes finally deleted the tails from the embryos and led the way to the arrival of modern human beings, Homo sapiens!

We Have The Power Today To Change Tomorrow! A MESSAGE FROM THE FOUNDER

65 million years back, the climate change helped the Earth mother to change her perceptions on life, totally. It was a way forward beyond the Dinosaurs.

Homo sapiens in us is facing a challenge about our common future! I am happy that Mother Earth has given us "native wisdom" to face challenges and search for native solutions!

This will take us forward into a far better world ahead. Fr. Chardin SJ and our own Indian philosopher, Sri Aurobindo visualize an incomparable future, the "Omega Point" (the last letter in Greek is Omega, therefore it's the end of the Universe! We are nowhere near it. Therefore, trusting in our native wisdom inside of us, we must face every crisis with a certain equanimity that eventually we will solve the crisis. That has been our big history!

Coming back to Climate Anxiety, Mother Earth through our "native wisdom" would help us to solve the problem created by climate crisis. An immediate example is the famous Atal Path in our capital city and the Ganga drive helping us to cope with the heavy traffic jams that our city was notorious for.

Another small example has been the plastic bottle bricks Shashi bhai helped the children to solve the problem of plastics...

Therefore, there is Climate crisis anxiety, but our Big long History teaches that there will be solutions to solve it gradually. Each of us is a brick that would solve the crisis! Take a chance to work with Mother Earth, with each of us to solve the crisis, one brick at a time!

Director Fr. Robert Athical,SJ

A MESSAGE FROM THE VOLUNTEER COORDINATOR

As the vibrant hues of spring unfold around us, it brings me great joy to introduce the latest edition of our GREEN NEWSLETTER. This edition, a labor of love and dedication, has been meticulously crafted by our talented interns Yashika, Aarav, Godawari, Navya, Devansh, and Diksha, under the expert guidance of our editors Naina and Harshnidhi, and brought to life by the creative brilliance of Navya. It stands as a testament to the unwavering spirit and dedication that defines Tarumitra.

The content of this edition is a culmination of extensive research and study conducted by our interns. It features invaluable contributions from various organizations and individuals committed to environmental conservation. These articles, thoughtfully curated and presented, offer a diverse array of perspectives and initiatives, underscoring the importance of collective action in tackling environmental challenges.

This edition holds particular significance as it represents the fruition of our new online internship engagement model. Despite the challenges of virtual interactions, our volunteers and interns have embraced the opportunity with fervor, dedicating themselves wholeheartedly to their environmental internships. This newsletter is a tangible outcome of their perseverance and commitment to learning and contributing to our environmental cause, even amidst logistical hurdles.

A MESSAGE FROM THE VOLUNTEER COORDINATOR

Since our inception in 1988 in Patna, India, as Tarumitra, meaning "Friends of Trees," we have been driven by a powerful vision: to instill ecological sensitivity in the youth, guiding their choices towards a sustainable future. This vision remains as pertinent as ever. The insights and developments shared in this newsletter underscore our enduring commitment to this mission, showcasing actionable ways we can all contribute to a healthier planet.

I am thrilled to announce our initiative to nurture ecological sensitivity among interns—an essential step towards cultivating the next generation of environmental leaders. This initiative not only enhances our capacity to address environmental issues but also ensures the lasting legacy of Tarumitra through innovative ideas and renewed enthusiasm.

As we look forward to future editions, I extend my heartfelt wishes for the success of this initiative and the continued growth of our movement. May the stories of change and resilience inspire us to embrace bold and purposeful actions aligned with the demands of the climate crisis.

Together, we wield the power of nature. Let us continue to evolve, educate, and advocate—for the trees, for the earth, and for the generations to come.

Volunteer Coordinator Shashi Darshan

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Navya Sinha



MONTHLY REWIND



By Aarav



JANUARY 2024

A month of government and farmer community planning the way towards sustainability and conservation

January saw some commendable events and efforts aimed at a greener and safer environment and future. From among them, we are going to briefly get the crux of Indigenous Seed Festival in West Bengal, Wetland City Accreditation and PRITHvi Vigyan Scheme.







MONTHLY REWIND



By Aarav

As the effects of climate change and growing severity of global warming can be felt across the world compelling the governments around the world to formulate new policies and inspiring people and communities to come together for a sustainable future, India is no exception. Some major events which can have lasting impact against global warming were seen occupying headline columns of newspapers in the month of January. They not only inform us about the plethora of ways we can combat the impending doom but also encourage us to do as much as we can , because it is not about me or you, but as Henry David Thoreau rightly said "What is the use of a house if you haven't got a tolerable planet to put it on". Now let us dive into the details and see what we can learn from these initiatives and policies and how we can make the mitigation of the risk more effective and impactful. So, let us start with the journey of becoming a climate conscious citizen of this planet.











remarkable effort by the farmers of West Bengal to conserve native seed varieties and exchange traditional knowledge, marking a significant step towards Sustainable Agriculture. This festival was held in Contai, West Bengal and was organised by Action Aid, Kajla Jankalyan Samiti, and Purba Medinipur Kisan Swaraj Samity.

Hundreds of farmers from various districts participated, showcasing native varieties of paddy, pulses, and vegetables with the purpose to conserve diverse native seeds, spread awareness about sustainable farming practices. But one may ask, what does the term "Sustainable Agriculture" actually mean? Precisely speaking, sustainable agriculture. Sustainable Agriculture is farming in such a way that protects the environment, aids and expands natural resources and to make the best use of renewable resources.

It involves practices like crop rotation and organic farming. It has numerous benefits like

i. Resource Conservation: Sustainable agriculture strives to conserve natural resources such as soil, water, and air. It encourages practices that reduce soil erosion, water pollution, and freshwater resource depletion.

ii.Soil Health Management: Sustainable agriculture emphasises the preservation and enhancement of soil health by use of methods like organic matter addition, composting, and reduced tillage.

iii.Biodiversity Protection: It promotes the utilisation of native species, the preservation of natural habitats, and the promotion of beneficial organisms such as pollinators and natural predators to control pests.

iv.Energy efficiency: Promotes adoption of renewable energy technology such as solar-powered irrigation systems, wind turbines, and the generation of bioenergy from agricultural wastes.











v. Social and economic benefits: Sustainable agriculture considers local farmers, labourers and resources thereby promoting a circular economy. It also advocates for fair trade, labour rights and equitable access to resources.

One of the key highlights of this festival was the discussion of formulating a seed bank plan, which is a place where seeds are stored to preserve genetic diversity for the future. They are usually flood, bomb and radiation-proof vaults holding jars of seeds from different plant species.

Although sustainable agriculture is an idealistic way of food production, according to a survey conducted by the Council on Energy, Environment, and Water (CEEW), less than 4%Indian farmers have implemented it. There are some challenges that make farmers refrain from adopting the sustainable agriculture practices.

Some of them are as follows:

i.Limited Resources: In countries like India where economic disparity is rampant, poor farmers lack incentives to shift to sustainable practices.

ii.Reliance on chemical inputs and lack of government support:
Almost all the farmers in India use chemical and synthetic
fertilisers, it would take active awareness drives and campaigns,
government support like subsidies, affordable pricing and
abundant organic supply to transit to sustainable alternatives.

iii. Market access and price instability: Since switching to sustainable practices involves long term planning and greater investments, it deters farmers from adopting sustainable practices.

Yes the way ahead seems difficult and the people lack awareness and the zeal to combat climate change at all levels, but events like these show that people are buckling up for foundational changes which will ensure a safe and sound survival of generations.











PRITHVI VIGYAN SCHEME

The union cabinet approved the overreaching scheme "PRITHvi VIgyan(PRITHVI) for implementation during the period 2021-26 with an overall cost of Rs. 4797 crores with the aims to significantly enhance research, modelling, and service delivery across crucial areas like weather, climate, oceans, and the polar regions. It integrates five existing sub-schemes:

- i. Atmosphere and Climate Research-Modelling Observing Systems and Services(ACROSS).
- ii. Ocean Services, Modelling Application, Resources and Technology (O-SMART)
- iii. Seismology and Geosciences (SAGE) iv.Research, Education, Training, and Outreach(REACHOUT)

Objectives:

- One of the primary objectives of Prithvi is to augment and sustain long-term observations across the atmosphere, ocean, geosphere, cryosphere, and solid earth.
- This will enable recording and monitoring of the Earth System's vital signs and changes.
- Additionally, the scheme focuses on developing predictive models for weather, ocean, and climate hazards, as well as advancing the understanding of climate change science.
- Exploration of the polar regions and high seas is another key aspect, aiming at discovering new phenomena and resources.
- The scheme also emphasises the development of technology for the exploration and sustainable harnessing of oceanic resources for societal applications.

The integrated research and development efforts across different Ministry of Earth Sciences institutes is expected to tackle the challenges like climate change, destruction caused by natural as well as man-made disasters and promote cryospheric studies and seismology and promote sustainable ways to harness both living and non-living resources.

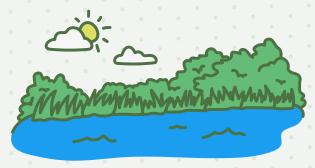








WETLANDCITY ACCREDITATION



The Ministry of Environment, Forest and Climate Change recently submitted three nominations from India for Wetland City Accreditation. The cities include Indore(Madhya Pradesh), Bhopal (Madhya Pradesh) and Udaipur (Rajasthan). These are the first three Indian cities for which nominations have been submitted for WCA based on proposals received from respective State Wetland Authorities in collaboration with Municipal Corporations. They are very crucial to climate conservation because the wetlands situated in and around these cities provide a plethora of benefits to its citizens in terms of livelihood opportunities, cultural value and food production.

i. Indore- Considered home to Sarus Crane, this city is famous for its cleanliness, vibrant culture and wetlands. It has a strong network of more than 200 wetland mitras engaged in bird conservation and local community awareness programs. Some notable wetlands here are Yashwant Sagar and Sirpur Lake.

ii. Bhopal- Situated in the fertile plain of Malwa Plateau and also known as 'the city of lakes', this city offers attractive natural tourist spots like the Bhoj Wetland.

iii. Udaipur- Dubbed "the most romantic spot on the continent of India by British administrator James Tod, Udaipur is a tourist destination and is known for its history, culture, scenic locations and the Rajput-era palaces. It has seven lakes surrounding the city. Five of the major lakes, namely Fateh Sagar Lake, Lake Pichola, Swaroop Sagar Lake, Rangsagar and Doodh Talai Lake. But what is the Wetland City Accreditation and why is it so significant? The WCAis a voluntary accreditation system established by the Ramsar Convention during the Conference of the Contracting Parties(COP) 12, 2015 to recognize cities that have taken exceptional steps to safeguard their urban wetlands.

- Theschemeaims to promote the conservation and wise use of urban and peri-urban wrelands, as well as sustainable socio-economic benefits for local populations.
- It is valid for 6 years
- It is granted to only those cities which satisfy the six international criteria like taking exceptional conservation methods in its conservation. It is important as it
- Encourages cities to develop positive relationships with valuable ecosystems like Wetlands of International Importance
- Aimsto gain international recognition for the wetlands









GREEN POLICY WATCH

Bridging the Gap: Environmental Justice Policies and Advocacy in the Green Policy Watch

By Diksha Yadav



In the pursuit of environmental sustainability, it is imperative to recognize that not all communities bear the same burden of environmental degradation. Marginalized and vulnerable populations often face disproportionate exposure to pollution, inadequate access to clean air and water, and limited participation in environmental decision-making processes. Environmental justice seeks to address these disparities and promote equity in environmental policy-making, ensuring that all communities have the right to a healthy and sustainable environment.

• Understanding Environmental Justice

Environmental justice is rooted in the principle that no community should bear a disproportionate burden of environmental hazards or suffer from environmental injustice. It encompasses a range of issues, including the equitable distribution of environmental benefits and burdens, meaningful participation in decision-making processes, and the recognition of historical and systemic injustices that have marginalized certain communities.

Disproportionate Environmental Burdens

Across the globe, marginalized communities, including low-income neighborhoods, Indigenous peoples, and communities of color, bear the brunt of environmental pollution and degradation. They often live near industrial facilities, waste disposal sites, and polluted waterways, leading to higher rates of asthma, cancer, and other health problems. In India, for example, informal settlements and marginalized communities are disproportionately affected by air pollution from industrial emissions, vehicular traffic, and biomass burning..

Policy Frameworks for Environmental Justice

To address environmental justice concerns, governments, civil society organizations, and grassroots activists have developed policy frameworks and advocacy strategies aimed at promoting equity in environmental decision-making and addressing environmental injustices.









In India, several policy initiatives and advocacy efforts are focused on advancing environmental justice and equity:

1. Polluter Pays Principle:

The Polluter Pays Principle holds polluting industries accountable for the environmental and social costs of their activities. Through regulations, fines, and penalties, industries are incentivized to adopt cleaner technologies, reduce emissions, and mitigate environmental impacts.

2. Right to Information (RTI) Act:

The Right to Information Act empowers citizens to access information about environmental policies, projects, and decision making processes. It promotes transparency, accountability, and public participation in environmental governance, allowing marginalized communities to advocate for their rights and hold authorities accountable for environmental injustices.

3. Public Interest Litigation (PIL):

Public Interest Litigation provides a legal mechanism for individuals and communities to seek judicial intervention on matters of public concern, including environmental issues. PILs have been instrumental in challenging environmentally harmful projects, promoting environmental conservation, and advocating for the rights of marginalized communities.

Community Empowerment and Participation

Empowering marginalized communities and promoting grassroots participation are essential components of environmental justice advocacy. Community-based organizations, nongovernmental organizations (NGOs), and social movements play a crucial role in raising awareness, mobilizing communities, and advocating for policy change. By amplifying the voices of those most affected by environmental injustices, these groups empower communities to demand accountability, seek redress for environmental harms, and advocate for sustainable solutions.

Addressing Systemic Injustices

Environmental justice advocacy also entails addressing the systemic inequalities and injustices that perpetuate environmental disparities. This includes addressing issues of poverty, racism, discrimination, and unequal access to resources and opportunities. Policies and programs aimed at promoting social and economic equity, investing in community development, and addressing the root causes of environmental injustices are essential for creating a more just and sustainable society.

Challenges and Opportunities

Despite significant progress, environmental justice advocacy faces numerous challenges, including political resistance, corporate influence, and limited resources. Marginalized communities often lack access to legal representation, technical expertise, and financial resources needed to effectively advocate for their rights. Additionally, government agencies and regulatory bodies may lack the capacity or political will to enforce environmental laws and regulations, leaving communities vulnerable to environmental harm.









Environmental Justice —Initiatives in India

In India, several policy initiatives and advocacy efforts are focused on advancing environmental justice and equity. Here are some examples:

2006:

Environmental Protection Act (EPA)

The EPA provides the framework for environmental protection and conservation in India. It empowers the central and state governments to take measures for protecting and improving the environment, preventing environmental pollution, and promoting sustainable development.

2010:

National Green Tribunal (NGT)

The NGT was established in 2010 to adjudicate environmental disputes and enforce environmental laws. It provides an avenue for affected communities to seek redress for environmental injustices, including pollution, land degradation, and environmental degradation.

2006:

Forest Rights Act

The Forest Rights Act recognizes the rights of forest dwelling communities, including Indigenous peoples and traditional forest dwellers, over forest land and resources. It aims to correct historical injustices and empower marginalized communities to protect and manage their ancestral lands sustainably.

2006:

Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act

This Act recognizes and vests forest rights and occupation in forest land in forest-dwelling Scheduled Tribes and other traditional forest dwellers, ensuring their equitable access to forest resources and participation in forest governance.









2005:

Right to Information (RTI) Act

The RTI Act enables citizens to access information about environmental policies, projects, and decision-making processes. It promotes transparency, accountability, and public participation in environmental governance, empowering marginalized communities to advocate for their rights and hold authorities accountable for environmental injustices.

1976:

Public Interest Litigation (PIL)

Public Interest Litigation provides a legal mechanism for individuals and communities to seek judicial intervention on matters of public concern, including environmental issues. PILs have been instrumental in challenging environmentally harmful projects, promoting environmental conservation, and advocating for the rights of marginalized communities.

2006:

Environmental Impact Assessment (EIA) Notification

The EIA notification mandates the assessment of potential environmental impacts of proposed projects before they are approved. It requires public consultation and consideration of the impacts on marginalized communities, promoting equity in decision-making and environmental protection.

2019:

National Clean Air Programme (NCAP):

Launched in 2019, the NCAP aims to reduce air pollution in Indian cities and improve air quality monitoring and management. It includes measures to address industrial pollution, vehicular emissions, biomass burning, and dust pollution, prioritizing actions in areas with high pollution levels and vulnerable populations.









2013:

Corporate Social Responsibility (CSR) Initiatives

The Companies Act, 2013 mandates certain companies to spend a portion of their profits on CSR activities, including environmental conservation and community development. CSR initiatives promote corporate accountability, environmental sustainability, and social equity, benefiting marginalized communities across India.

These policy initiatives and advocacy efforts play a crucial role in advancing environmental justice and equity in India, promoting fair treatment, meaningful participation, and equitable distribution of environmental benefits and burdens among all communities.

In the Green Policy Watch, environmental justice must be a central focus, ensuring that environmental policies and initiatives prioritize equity, inclusion, and justice for all. By elevating the voices of marginalized communities, advocating for policy change, and challenging systemic injustices, the Green Policy Watch can serve as a platform for advancing environmental justice and promoting a more sustainable and equitable future for India and beyond. As we work towards a greener and more just world, let us remember that environmental justice is not just a goal, but a fundamental human right that must be upheld and protected for generations to come.





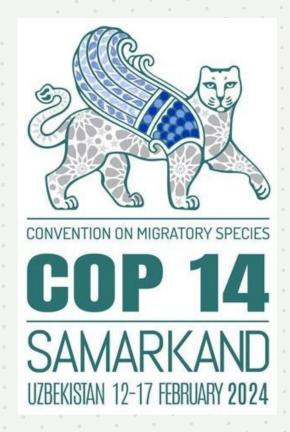




CMS COP14

By Yashika Gidwani

In the heart of the ancient Silk Road city of Samarkand, Uzbekistan, history was made at the 14th Meeting of the Conference of the Parties to the Convention on Migratory Species of Wild Animals (CMS COP14). Under the theme of "Nature knows no borders," this groundbreaking event marked the first CMS COP since the COVID-19 pandemic, the first to be hosted in Central Asia, and the first major biodiversity conference since the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF) in 2022.



COP14 was a vibrant gathering, with 52 agenda items covering a wide array of crosscutting, terrestrial, avian, and aquatic issues. Some of the key highlights include:

- The launch of the inaugural flagship State of the World's Migratory Species report, offering a comprehensive snapshot of the current status of migratory species and their habitats.
- A resolution on deep-sea mining, addressing the potential impacts of this activity on migratory species and their habitats.
- Updated guidelines on light pollution and infrastructure, new guidelines on ecotourism, and key guiding principles for community involvement in the conservation of migratory species.
- Decisions on investigating the conservation implications of animal culture and social learning for a diverse range of taxa, including fish and reptiles.

 COP14 was not just a meeting; it was a historic crossroads for the conservation of migratory species and their habitats across the globe. From the depths of the sea to the heights of the sky, and spanning every type of ecosystem in between, the discussions and decisions made at COP14 will shape the future of these species for generations to come.

Ever Wondered the need for such a convention to form? Here's Why

Migratory species face various threats like habitat loss, hunting, and habitat degradation. To address these concerns, the Convention on Migratory Species (CMS), also known as the Bonn Convention, was adopted in 1979 and came into force on 1 November 1983. It recognizes that states must protect migratory species within their national jurisdictions and aims to conserve terrestrial, marine, and avian migratory species throughout their ranges. Currently, CMS has 133 parties.









Resolutions to expect for Migratory Birds:

At COP14, Parties will discuss draft Decisions under CMS COP Resolution 11.16 (Rev. COP13) addressing the threat of illegal killing and trade of migratory birds. This includes the work of the Intergovernmental Task Force on Illegal Killing, Taking, and Trade of Migratory Birds in the Mediterranean (MIKT), which focuses on the Mediterranean region, a hotspot for this issue. MIKT is the first pan-Mediterranean task force aiming to enhance international cooperation and implement existing guidelines and action plans. It serves as a model for other regions facing similar challenges.

Adoption of Listing Proposals:

During the conference, parties agreed to adopt listing proposals for 14 migratory species, including the Eurasian lynx, Peruvian pelican, Pallas's cat, guanaco, Lahille's bottlenose dolphin, harbour porpoise, Magellanic plover, bearded vulture, Blackchin guitarfish, Bull ray, Lusitanian cownose ray, Gilded catfish, and Laulao catfish. These listings aim to enhance protection and conservation efforts for these species.

Cooperation and Conservation Efforts:

The proposals emphasized the importance of cooperation between range states to address threats to migratory species, conduct research, and implement conservation activities. Range states refer to countries or territories that are within the geographical range where a particular species occurs naturally. These countries or territories are directly involved in the management, conservation, and protection of the species and its habitat. Efforts were focused on maintaining existing populations, improving connectivity, safeguarding habitats, and restoring populations.

Focus on Threats:

Various threats to migratory species were highlighted, including habitat degradation, fragmentation, illegal trade, bycatch, contaminants, and human activities such as fencing, oil and gas development, mining, and underwater noise. The inclusion of these species in the CMS appendices aims to address these threats and promote their conservation.

International Collaboration:

Range states collaborated to propose listing amendments and adoption of conservation measures. Countries like North Macedonia, Kazakhstan, Uzbekistan, Chile, Argentina, Peru, Brazil, Uruguay, Ecuador, Panama, and others supported listing proposals and urged for joint efforts to protect migratory species and their habitats.

Recognition of Endangered Status:

Several species, such as the Lahille's bottlenose dolphin, Peruvian pelican, and Magellanic plover, were recognized as 'Vulnerable,' 'Endangered,' or 'Critically Endangered' in IUCN Red List, due to population decline and various threats. Listing these species in CMS appendices aims to improve their conservation status and provide support for habitat protection.

Regional and Global Conservation Initiatives:

The adoption of proposals reflected efforts to address conservation issues at regional and global levels. Measures were recommended to protect specific populations, such as the Baltic Proper population of the harbour porpoise and the Mediterranean Sea populations of various species, while also considering broader conservation strategies.









India has actively engaged in the conservation and management of migratory species through the signing of non-legally binding Memorandums of Understanding (MoUs) with CMS. These MoUs, focusing on the conservation and management of Siberian Cranes (1998), Marine Turtles (2007), Dugongs (2008), and Raptors (2016), underscore India's commitment to international cooperation in biodiversity conservation. India's significant land area, accounting for 2.4% of the world's total, is home to a rich diversity of species, contributing approximately 8% to the global biodiversity. The country also serves as a temporary habitat for various migratory species, including Amur Falcons, Bar-headed Geese, Black-necked Cranes, Marine Turtles, Dugongs, and Humpback Whales, among others.

India's Conservation Initiatives:

Marine Turtle Policy and Marine Stranding Management Policy: Launched by 2020, these policies aim to protect and conserve marine turtles, addressing threats such as habitat loss, pollution, and illegal trade.

Reduction of Plastic Pollution: India is committed to reducing pollution from micro-plastics and single-use plastics, which pose significant threats to marineand terrestrial ecosystems.

Transboundary Protected Areas: India has established transboundary protected areas toconserve flagship species like Tigers, Asian Elephants, Snow Leopards, Asiatic Lions, Onehorned Rhinoceroses, and the Great Indian Bustard, promoting regional cooperation in conservation.

Sustainable Infrastructure Development: The Linear Infrastructure Policy Guidelines ensure that development projects in ecologically fragile areas are sustainable and do not harm wildlife habitats.

Project Snow Leopard(PSL): Launched in 2009,PSL aims to conserve snow leopards and their habitatsthrough an inclusive and participatory approach.

Dugong Conservation Reserve: India has established its first Dugongconservation reserve in Tamil Nadu, providing a safe haven for this endangered species.









Wildlife Protection Act, 1972: The Wildlife Protection Act, 1972, provides the highest degree of protection to rare and endangered species of birds, including migratory birds, by listing them under Schedule-I of the Act.

Protected Areas: Important habitats of birds, including migratory birds, have been notified as protected areas under the Act, ensuring their conservation and protection.

Other Initiatives:

Focused Protection Measures: In Nagaland, India has implemented focused protection measures for Amur Falcons, which migrate through Northeast India on their way to Southern Africa.

Vulture Conservation: India has taken several steps to conserve vultures, including banning the veterinary use of diclofenac and establishing vulture breedingcenters.

Wildlife Crime Control Bureau: Established to combat illegal trade in wildlife and its products, the WildlifeCrime Control Bureauplays a crucial role in wildlife conservation.

India's active participation in CMS COP14 and its comprehensive conservation initiatives demonstrate its commitment to protecting migratory species and their habitats, both within its borders and beyond.

India's Nuclear Power Sector: A Strategic Shift Towards Private Investment

The government is currently in talks with five major firms — Reliance Industries, Tata Power, Adani Power, and Vedanta Ltd. Each company is expected to invest around \$5.3 billion. This significant investment aims to build 11,000 megawatts of new nuclearpower generation capacity by 2040.

Currently, the NuclearPower Corporation of India (NPCIL)owns and operatesthe existing nuclear power plants with a capacity of 7,500 MW and has committed investments for anadditional 13,000 MW.

With an aim to bolster the share of electricity generated from sources that do notproduce carbon dioxideemissions, India is planning to invite privatecompanies to investapproximately \$26 billion in its nuclear energy sector. The proposed funding is crucial for India to achieve its target of having 50% of its installed electric generation capacity sourced from nonfossil fuels by 2030, compared to the current 42%.

India's nuclear power sector is poised for a transformational shift, with private investment expected to play a pivotal role in drivinggrowth and sustainability. This strategic move not only underscores India's commitment to clean energy but also positions the country as a global leader in nuclear power innovation and development.





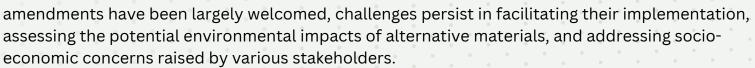




"Single-Use Plastics:
A Closer Look at the Ban"

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The Plastic Waste Management (PWM) Rules, 2021, introduced a pan-Indian ban on a group of single-use plastic products (SUPPs) in mid-2022, marking a significant departure towards more progressive plastic waste legislation. While the



In light of these recent amendments, we critically engage with and highlight key considerations and prevailing challenges regarding the phasing out of SUPPs.

To shape sustainable solutionsthat effectively reduceplastic pollution, it is essential to better understand the uncertainties related to the environmental fate of SUPP alternatives.

Additionally, it is crucial to recognize and account for the broader socio-economic impacts of SUPP bans, including industry concerns, impacts on socio-economically disadvantaged communities, and the informal recycling sector. A stronger knowledge base on these aspects can help mitigate negative social and environmental externalities, including potentially harmful consequences of ambitious plastic pollution reduction measures.

India represents an interesting case to investigate these interlinkages, given the country's rapid economic growth, urbanization, and socio-political diversities, in addition to its important role in international negotiations. These trends and diversities provide a backdrop to explore priorities, stakeholder interests, and socio-economic impacts of commonly promoted pollution reduction strategies, taking into consideration the recent pan-Indian ban on certain SUPPs.

In the Indian policy context, plastic pollution has largely been framed as a littering issue, with a focus on promoting 'cleanliness' and 'aesthetics' over larger concerns related to plastic waste management. These concerns include improving source segregation and waste collection coverage, reducing toxic releases of chemicals, burning of waste, and fossil fuel dependence. Although India has pledged to eliminate all SUP in the country by 2022, the implementation of related regulatory measures continues to face challenges. These challenges are linked to health and environmental concerns of SUPP alternatives, industry interests, and social equity considerations.











As we delve into the history of fighting for environment and climate change in India, figures such as Amrita Devi and Medha Patker have made a lasting impact, motivating a fresh wave of environmental activists. Amidst the challenges posed by the Global Ecological Emergency, these trailblazers serve as a reminder of the enduring influence of grassroots movements and personal dedication. Their environmental legacy delving into the Bishnoi Movement gave rise to modern environmentalists like Radhika Anand, Shyam Sunder Jyani and more..

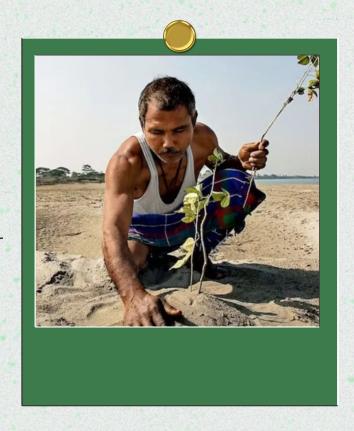
Jadav Payeng- The Forest Man of India

Jadav Payeng has been planting trees since 1979. Payeng has been the biggest contributor to trees in the Molai forest, Assam.

Inspired by the aftermath of a devastating drought that claimed the lives of numerous snakes on Majuli Reserve, the world's largest river island situated in India's Brahmaputra river, Jadav "Molai" Payeng, then a 16-year-old, took it upon himself to make a difference.

He has transformed the once barren land into a thriving forest, spanning an impressive 1,390 acres, equivalent to approximately 15 football stadiums, over four decades. Hailing from a humble background and belonging to a marginalized tribal community in Assam, Payeng dedicated his entire focus to planting trees and leaving behind formal education.

Jadav's inspiring journey showcases the profound impact one individual's passion and perseverance can have on the environment. In 2015, he was honored with Padma Shri, the fourth-highest civilian award in India







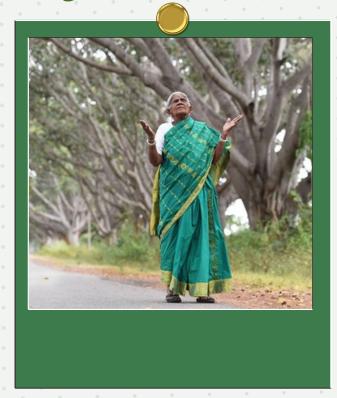




Saalumarada Thimmakka- Self-Taught Environmentalist

Saalumarada Thimmakka alongside her now late husband planted 384 Banyan trees stretching 4km along the highway that connects Hulikal and Kudur. She earned her name Saalumarada from the locals, meaning "rows of trees" in the Kannada language. She kept her strong will of planting trees strong even after the passing of her husband in 1991.

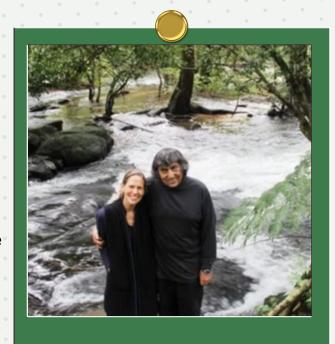
In recognition of her extraordinary efforts, she was honored with the National Citizens Award in 1996 and the prestigious Godfrey Phillips Award in 2006. Saalumarada Thimmakka's inspiring journey serves as a testament to the transformative power of individual commitment toward environmental conservation.



Pamela and Anil Malhotra-Founders of Sai Sanctuary

Through diligent purchase and restoration, they transformed the abandoned agricultural land in Kodagu district, Karnataka. Their story is one of passion, dedication, and an unwavering commitment to preserving the environment. Starting with a small piece of barren land in the Western Ghats of India, they set out to transform it into a lush, thriving forest. Their journey began with a vision to restore the natural ecosystem and protect the rich biodiversity of the region.

Today, the forest that Pamela and Anil Malhotra have created spans an impressive expanse of 300 acres. Their forest is not just a collection of trees; it is a haven for countless plant and animal species. It has become a sanctuary for biodiversity, providing a safe habitat for a wide range of flora and fauna. The forest also acts as a carbon sink, mitigating the effects of climate change by absorbing carbon dioxide from the atmosphere.





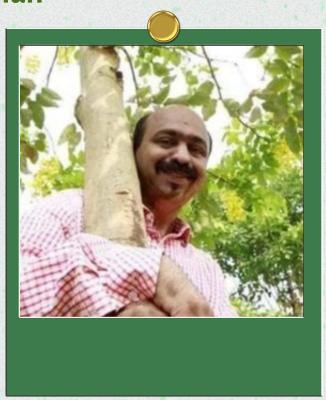




Deepak Gaur- Gurgaon's Tree Man

37-year-old Deepak Gaur aimed to plant a billion trees. Since 2012, he has planted and distributed more than 600 thousand trees with a proposal for the government to join him in this mission.

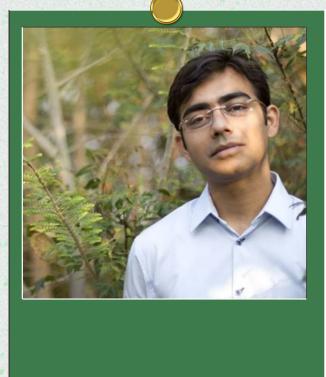
Deepak developed an interest in growing trees after he met with an accident in 2010 which left him in a coma for almost 6 months. This lifechanging experience taught Deepak the importance of nature and its preservation after not seeing and feeling trees and fresh air. He realized that trees provide us with oxygen, and even if we cut them down, the remaining one percent can still give us oxygen. Trees do not discriminate between humans based on social class, religion, or ethnicity. They continue to provide us with oxygen selflessly.



Shubhendu Sharma- Founder of Afforestt

An industrial engineer turned Socio-Eco Entrepreneur, started his journey of growing trees in his backyard. He founded Afforestt, a service provider for creating natural, wild, maintenance-free, native forests. He was working at Toyota in India when he met Japanese forest expert Akira Miyawaki.

Smitten by Akira Mayawaki and his methodology developed to make forests grow faster, Shubhendu interned with Mayawaki. He then grew his first successful forest on a small plot in his backyard. Presently, Afforestt utilizes his car-manufacturing expertise to assist with a standardized method of seeding dense, fast-growing, native forests in barren lands. This innovative approach has enabled the growth of a multi-layer forest of 300 trees, even in an area as small as the parking spaces of six cars. In addition, the cost of growing these forests is remarkably low.







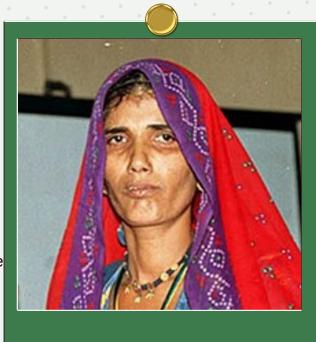




Amrita Devi- A Symbol of Environmental Heroism

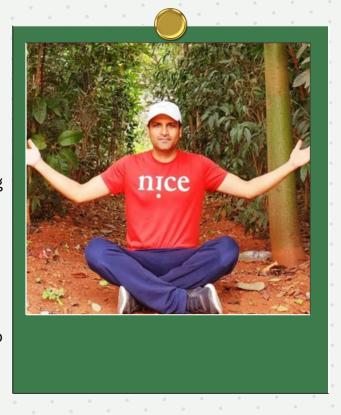
Amrita Devi, a symbol of environmental heroism, led the historic Bishnoi movement in 1730. She sacrificed her life to protect trees from being felled by royal foresters, inspiring villagers to embrace conservation. This act of selflessness laid the foundation for the Bishnoi community's ethos of environmental stewardship, making them pioneers in wildlife conservation and sustainable living. Amrita Devi's legacy continues to resonate, emphasizing the crucial link between human well-being and environmental preservation.

Amrita Devi's unwavering courage sparked a collective awakening among the Bishnoi community, who vowed to safeguard nature at any cost. Their deep reverence for all living beings led to the establishment of strict environmental principles, including the prohibition of tree cutting and hunting. This grassroots movement not only protected forests and wildlife but also inspired similar conservation efforts across India.



Kapil Sharma- Co-Founder of SayTrees

An entrepreneur, innovator, and software developer hailing from Chandigarh. Kapil Sharma co-founded and started SayTrees an NGO to fight climate change and save the environment and make the city greener by taking the message to different schools, institutions, villages, and communities. Kapil has planted over 35,000 saplings all over Bengaluru. Kapil aims to restore 2 million hectares of land in India by 2030 and create awareness regarding the importance of growing trees in the context of growing globalization. Kapil's NGO, SayTrees, is driven by a group of individuals who are deeply committed to environmental protection. Their mission extends beyond their efforts as they actively raise awareness about the significance of environmental conservation and encourage others to engage in tree plantation campaigns. What initially began as a weekend endeavor in 2007 has now evolved into a remarkable initiative, conducting over 50 tree plantation drives within the span of four monsoon months.











ENVIRONMENTAL SOCIAL GOVERNANCE

INTRODUCTION TO ESG

By Devansh Awasthi

ESG, a term extensively used in commercial investing and used currently as a rhetorical word for "woke capitalism", finds it's roots going back to two decades. The term was first used by a 2004 report, named, "Who cares wins", prepared by the United Nations and 20 other fiscal enterprises including Goldman Sachs, Morgan Stanley and UBS. ESG stands for environmental, social and governance. These are called pillars in ESG fabrics and represent the 3 main content areas that companies are anticipated to report in. The thing of ESG is to capture all the non-financial pitfalls and openings essential to a company's day to day conditioning.

Environmental- Emigrations include effects like feasts that contribute to climate change and pollution in the air, water, and soil. When it comes to coffers, it's about how companies use accourrements in their products. For illustration, do they use new accourrements or recycled bones? And how do they make sure those accourrements are reused or reclaimed rather of being thrown down? Companies also need to be careful with water and how they use it. They should be aware of how they use land too, like not cutting down too numerous trees or harming wildlife.

Social- Under the Social Pillar companies report on how they manage their hand development and labour practices. They report on product arrears regarding the safety and quality of their product. They also report on their force chain labour and health and safety norms and controversial sourcing issues. Where applicable companies are anticipated to report on how they give access to their products and services to depressed social groups. "Directly or laterally, companies affect what happens to workers, workers in the value chain, guests and original communities, and it's important to manage impacts proactively." – UN Global Compact

Governance- The main issues reported under the Governance Pillar are shareholders rights, board diversity, how directors are compensated and how their compensation is aligned with the company's sustainability performance. It also includes matters of commercial scandal similar as anti-competitive practices and corruption.











Introduction

"Seeking sustainable investments? Have you heard of ESG? Let's Dive into this acronym-packed trend: What exactly is ESG and why does it matter?" Environmental, Social, and Corporate Governance(ESG)is an approach to evaluating the way in which a corporation works to achieve a certain set of environmental goals, social goals, and corporation goals. It is important because it refers to a set of standards for a company's behaviour used by socially conscious investors to screen potential investments. Today, investors are increasingly eager to align their portfolios(Bag of shares) with ESGcompliant companies.

Here is the breakdown of the components of ESG:



Environmental (E): This aspect of ESG focuses on a company's impact on the environment. It includes considerations such as:

- Carbon footprint: Measures of greenhouse gas emissions and efforts to reduce them.
- Energy efficiency: Strategies to minimize energy consumption and transition to renewable energy sources.
- Waste management: Policies and practices for reducing, recycling, and disposing of waste responsibly.
- Biodiversity conservation: Efforts to protect natural habitats and ecosystems.
- Pollution prevention: Initiatives to mitigate air, water, and land pollution.

Social (S): The social dimension of ESG looks at how a company interacts with society and stakeholders. It encompasses various factors such as:

- Labor practices: Fair wages, safe working conditions, and policies to prevent discrimination and ensure diversity and inclusion.
- Human rights: Respect for fundamental human rights throughout the supply chain and operations.
- Community engagement: Investments in local communities, philanthropic activities, and partnerships to address social needs.
- Customer relations: Product safety, data privacy, and customer satisfaction initiatives.
- Stakeholder engagement: Transparency, dialogue, and responsiveness to the concerns of investors, employees, customers, and other stakeholders.











Governance (G): Governance refers to the systems and processes that guide corporate decision-making and oversight. It includes elements such as:

- Board structure and independence: Composition, diversity, and expertise of the board of directors.
- Executive compensation: Alignment of executive pay with company performance and shareholder interests.
- Transparency and disclosure: Timely and accurate reporting of financial and non-financial information to investors and stakeholders.
- Ethics and integrity: Adherence to ethical standards, codes of conduct, and anti-corruption policies.
- **Risk management:** Robust systems for identifying, assessing, and mitigating risks across the organization.

INITIATIVES OF FOREIGN COUNTRIES FOR MITIGATING CLIMATE CHANGE

By Godavari Sharma



United States:

- Clean Power Plan: Introduced during the Obama administration, aimed to reduce carbon pollution from power plants by setting state-specific emission reduction targets.
- Fuel Economy Standards: The U.S. Environmental Protection Agency (EPA) sets fuel economy standards for cars and light trucks to reduce greenhouse gas emissions from the transportation sector.
- Renewable Energy Tax Credits: Various federal tax credits incentivize the deployment of renewable energy technologies such as solar, wind, and geothermal.

European Union:

- EU Emissions Trading System (EU ETS): Established in 2005, it's the world's first and largest carbon market, regulating emissions from more than 11,000 power stations and industrial plants.
- Renewable Energy Directive: Sets binding targets for EU countries to increase the share of renewable energy in their energy consumption.
- Energy Efficiency Directive: Aims to improve energy efficiency across the EU, setting binding targets for reducing energy consumption.









China:

- Carbon Intensity Targets: China has set targets to reduce carbon intensity (carbon emissions per unit of GDP) as part of its efforts to control greenhouse gas emissions.
- Renewable Energy Quotas: Requires provincial governments to meet specific renewable energy consumption targets.
- Carbon Pricing Pilots: China has initiated carbon pricing pilots in several regions as a precursor to a national carbon market

India:

- National Clean Air Programme (NCAP): Aims to reduce air pollution in Indian cities and regions, which contributes to climate change mitigation efforts.
- **National Solar Mission:** Sets targets for solar energy deployment and aims to achieve 100 GW of solar capacity by 2022.
- Electric Vehicle Promotion: Various incentives and subsidies are provided to promote the adoption of electric vehicles to reduce emissions from the transportation sector.

Canada:

- Carbon Pricing: Implemented carbon pricing mechanisms, including a federal carbon tax and cap-and-trade systems in some provinces.
- Clean Fuel Standard: Aims to reduce the carbon intensity of fuels and encourage the use of cleaner alternatives.
- **Methane Regulations:** Introduced regulations to reduce methane emissions from the oil and gas sector.

Germany:

- Other renewable energy sources.
- Germany has been a leader in renewable energy adoption, implementing the
- Energiewende (Energy Transition) policy
- To shift towards a low-carbon, nuclear-free economy.
- This involves significant investments in wind, solar

Denmark:

- Denmark has set ambitious targets to reduce greenhouse gas emissions and increase renewable energy production .
- They are investing in offshore wind farms, energy-efficient buildings, and sustainable transportation solutions.









United Kingdom:

- •The UK has committed to reaching net-zero greenhouse gas emissions by 2050 and has implemented various policies to achieve this goal.
- •This includes phasing out coal-fired power plants, investing in offshore wind energy, and promoting electric vehicles.

SUCCESS STORIES: REAL-LIFE EXAMPLES OF ESG IMPACT

ESG has become increasingly important to investors and consumers alike. The reasons are many, from financial success to long-lasting positive change for social and environmental impacts. Also, as is shown in a recent study by **Ernst & Young**, ESG is positively correlated with better risk management, improved corporate reputation, and increased innovation. Besides, that study has shown that companies with strong ESG performance achievedanaveragereturnoninvestmentof10.4%comparedto7.4%forthose with weak ESG performance.(ESG,Ernst&Young) Additionally, **McKinsey & Company** found that ESG-focused companies have lowervolatilityandhigherrisk-adjusted returns compared to their peers, making them more attractive investments. ESG practices have a significant impact on the bottom line of businesses. We will explore the success of different companies in several industries-Microsoft, Costco, Ely Lilly, and Mattel-and the positive impact of their ESG initiatives.

Microsoft: A Leader in Sustainable Technology



Microsoft is well-known for its innovative technology and now for its commitment tosustainability. During 2020, Microsoft committed to be coming carbonnegative by 2030 and has since invested in renewable energy projects to achieve this goal. According Microsoft's 2020 ESGR eport, "Microsoft is committed to using their technology and influence to help solve the world's biggest environmental challenges." Additionally, the leading technology company has made a commitment to sustainability through its "Environmental Sustainability Vision" program. This program aims to minimize the company's environmental impact and support a sustainable future.







What are the results

As a result of its ESG efforts, Microsoft has seen a reduced carbon footprint, increased energy efficiency, and decreased waste generation. As well, thecompanyhasreporteda\$10billionincreaseinsalesdue to its ESG initiatives.



Costco: Creating a Sustainable Supply Chain



Costco, the famous retail giant in America, is now focused and committed to sustainability and ethical sourcing practices. The company has implemented several ESG initiatives in the previous years, including reducing waste and promoting sustainable agriculture. According to Costco's 2020 ESG Report, "Our goal is to create a sustainable supply chain that benefits our members, our suppliers, and the environment." Also, the retailer has made a commitment to sustainability through its "Sustainable Business Strategy" program. This program includes initiatives to reduce waste, promote sustainability in its supply chain, and invest in renewable energy.

What are the results

Consequently of their ESG efforts, Costco has seen a 20% increase in customer satisfaction, a 15% increase in employee engagement, and a 10% increase in shareholder value.









Mattel: Building a Better Future for Children



Mattel, the popular toy manufacturer, has started ESG initiatives committed to creating a better future for children. The company's ESG plans include promoting sustainability, reducing waste, and promoting diversity and inclusion in the workplace. Mattel's" Sustainability360" program tries to reduce the company's carbon foot print and promote sustainable and social practices throughout the supply chain. Also, the top toy company has made its commitment to sustainability through its "CorporateResponsibilityStrategy" program. This program includes initiative sto reduce waste and invest in renewable energy.

What are the results

As a result of its ESG efforts, Mattel has seen a 10% increase in customer satisfaction, a 5% increase in employee engagement, and a 5% increase in share holder value.



Ely Lilly

Ely Lilly, the pharmaceutical company, has made a commitment to sustainability through its "Corporate Responsibility Strategy" program. This program includes initiatives to positive impact on people, the planet and society. This has been done by Offering \$35 or Less Monthly Insulin for Lilly medicines, and decreasing their carbon emissions according to the Environment Goals of 2030.











Infosys

Infosys, one of India's largest IT services companies, has made significant strides in environmental sustainability.

The company has implemented various initiatives to reduce its carbon footprint, increase energy efficiency, and promote renewable energy usage in its operations. Infosys has also set ambitious goals to achieve carbon neutrality and reduce water consumption.



Tata Steel

Tata Steel, a leading steel manufacturing company in India, has prioritized environmental sustainability in its operations. The company has adopted innovative technologies to reduce carbon emissions, increase energy efficiency, and minimize waste generation. T



Aditya Birla Group

Aditya Birla Group, a multinational conglomerate with interests in various sectors including metals, cement, and textiles, has prioritized environmental sustainability across its businesses. The company has implemented measures to reduce emissions, conserve resources, and promote circular economy principles. Aditya Birla Group also engages in afforestation and biodiversity conservation initiatives.













Carbon taxes are a way for governments to tackle climate change by putting a price on carbon emissions. Carbon Tax is a scheme wherein the governments aim to tackle climate change by putting a price on carbon emissions and capping those carbon emissions. They work by taxing fossil fuels and industries based on the amount of carbon they emit. The idea is to make carbon-intensive activities more expensive, encouraging businesses and individuals to reduce their emissions and adopt cleaner alternatives. Carbon taxes can help drive the transition to renewable energy sources and promote sustainable practices. They also generate revenue that could be used for environmental initiatives. By implementing this policy, the governments aim to incentivize greener choices and mitigate the impact of climate change.

Some common elements of carbon tax schemes include:

- 1. Pricing: Carbon taxes typically involve setting a price per ton of carbon dioxide equivalent (CO2e) emissions. This price can be fixed or variable, depending on the design of the scheme.
- 2. Coverage: Carbon taxes can apply to different sectors of the economy, such as energy production, transportation, and industry.
- 3. Revenue use: The revenue generated from carbon taxes can be used in various ways, such as funding renewable energy projects, providing rebates to low-income households, or reducing other taxes.
- 4. Compliance mechanisms: Carbon tax schemes may include mechanisms to ensure that businesses and individuals comply with the tax, such as monitoring emissions and reporting requirements.
- 5. Flexibility: Some carbon tax schemes allow for flexibility in how reductions in emissions are achieved, such as through trading of carbon credits or offsets.

 (carbon credits offsets are 3-4 lines)

Carbon tax schemes have been implemented in various countries, including Sweden, Norway, and Canada. These schemes have been successful in reducing greenhouse gas emissions and promoting the transition to a low-carbon economy.

However, carbon tax schemes also face challenges, such as opposition from industries that rely heavily on fossil fuels and concerns about the impact on low-income households. To address these challenges, policymakers may need to design carbon tax schemes that are fair, effective, and politically feasible.







Country Wise Carbon Tax Schemes



- 1. **Sweden:** Sweden has implemented a carbon tax scheme since the early 1990s. It covers various sectors and applies to fossil fuels. The tax has gradually increased over the years, making it one of the highest in the world.
- 2. **Canada:** Canada has a federal carbon pricing system, which includes a carbon tax. Provinces and territories without their carbon pricing systems are subject to this tax. The tax increases annually to encourage emission reductions.
- 3. *Finland*: Finland introduced a carbon tax in 1990. It applies to fossil fuels and covers a wide range of sectors. The revenue generated from the tax is used to support renewable energy and climate change initiatives.
- 4. *India:* India has not implemented a nationwide carbon tax scheme as of now. However, the country has introduced various other measures to address climate change, such as renewable energy targets, energy efficiency programs, and initiatives to promote sustainable development.
- 5. **Norway:** Norway has a carbon tax that applies to various sectors, including petroleum activities and emissions from industrial processes. The tax has been in place since the early 1990s and has contributed to significant emission reductions.









Global North and Global South Countries

Global North countries:

- 1. **Canada:** Canada implemented a nationwide carbon tax in 2019, where provinces are required to have a minimum price on carbon emissions. The revenue collected is returned to households as a rebate.
- 2. **Sweden:** Sweden has had a carbon tax since the early 1990s. It has been successful in reducing emissions and promoting renewable energy sources.
- 3. **Germany:** Germany introduced a carbon tax in 2021, which applies to sectors not covered by the European Union Emissions Trading System. It aims to further reduce emissions and drive the transition to cleaner energy.

Global South countries:

- 1. **Costa Rica:** While not a carbon tax, Costa Rica implemented a payment for environmental services program. It rewards landowners for conserving forests, which helps mitigate carbon emissions.
- 2. **South Africa:** South Africa has proposed a carbon tax that came into effect in 2019. It aims to reduce greenhouse gas emissions and encourage businesses to transition to cleaner technologies.
- 3. **Mexico:** Mexico implemented a carbon tax in 2014, primarily targeting fossil fuel consumption. The revenue collected is used to fund renewable energy projects and promote sustainable development.

Comparison -

- 1. **Sweden:** Sweden has a high carbon tax rate and covers multiple sectors, including transportation, industry, and heating. The tax aims to incentivize emission reductions and promote cleaner energy sources.
- 2. **Canada:** Canada has a federal carbon pricing system that includes both a carbon tax and a cap-and-trade system. The tax is gradually increasing and varies by province, encouraging emission reductions.
- 3. *Finland:* Finland has a carbon tax that applies to fossil fuels based on their carbon content. The tax aims to promote the use of cleaner energy sources and reduce carbon emissions.
- 4. *Australia:* Australia previously had a carbon tax but repealed it in 2014. However, they have other climate policies like the Emissions Reduction Fund.











Tax Rate for **Carbon Tax Scheme**

The tax rates for carbon tax schemes can vary from country to country. It's important to note that these rates can change over time and may differ based on factors such as the type of emissions and the specific goals of the scheme.

- 1. Sweden: the carbon tax rate is around 1200 SEK (Swedish Krona) per ton of carbon dioxide emitted. In Canada, the federal carbon tax rate is currently set at 40 CAD (Canadian Dollar) per ton of carbon dioxide, with plans to increase it to 170 CAD by 2030.
- 2. Finland: the carbon tax rate is approximately 30 EUR (Euro) per ton of carbon dioxide equivalent emissions. Australia has a different approach with its carbon pricing mechanism, where the price is determined by the market. Norway has a carbon tax rate of around 590 NOK (Norwegian Krone) per ton of carbon dioxide.

3. India: there isn't a nationwide carbon tax scheme in place at the moment. However, the government has implemented various initiatives and policies to address climate change and reduce carbon emissions.

India has set renewable energy targets and aims to increase its share of renewable energy in the overall energy mix. The government has also introduced the Goods and Services Tax (GST), which includes a tax component on certain goods and services that have a higher carbon footprint.

Additionally, different states in India may have their own local taxes and levies related to carbon emissions and environmental conservation. These can vary in terms of rates and implementation. It's great to see that you're interested in the environmental impact of taxation.











CLIMATE FINANCING

By Yashika Gidwani



Climate finance encompasses the financial resources and tools utilized to bolster efforts against climate change. This includes various forms of funding such as grants from international funds, loans from financial institutions, green bonds issued by governments, and funds generated through carbon trading and taxes. While investments in climate action can yield substantial benefits, there is still a significant funding gap to bridge to advance the transition to green economies and enhance resilience in developing nations. It is estimated that current financial flows for climate change mitigation need to triple to meet the goals of the Paris Agreement and limit global warming to 2°C or below. The United Nations Development Programme (UNDP) is a key player in assisting countries in accessing and effectively utilizing climate finance. Some Multilateral funds include - Green Climate Fund (GCF), the Global Environment Facility (GEF), and the Adaptation Fund (AF). These funds were established throughout the years as financial instruments of the United Nations Framework Convention on Climate Change (UNFCCC) to provide resources to developing and under-developed countries

How are the funds decided?

Governments through their budgeting processes, can allocate funding to priority climate actions, such as those set out in their national climate pledges (referred to as Nationally Determined Contributions under the Paris Agreement), or issue sovereign green bonds to fund those projects.

Sovereign bonds are loans that governments take from a pool of investors in exchange for regular interest payments over a certain number of years. At the end of this period, when the bond reaches maturity, the government returns the initial investment to the investors. • Significance - Sovereign green issuance sends a powerful signal of intent around climate action and sustainable development to governments and regulators. • The IEA's World Energy Outlook 2021 predicts that 70% of the extra USD 4 trillion needed to achieve net-zero emissions will be required in emerging and developing economies. Sovereign issuance can play a crucial role in initiating these significant capital inflows. One such example of Climate Financing can be understood through the working mechanism of UNFCCC – United Nations Framework Convention on Climate Change which is an international treaty among countries to combat "dangerous human interference with the climate system", in part by stabilizing greenhouse gas concentrations in the atmosphere.









UNFCCC

- Adopted 1992
 - Force 1994
- HQ- Bonn, Germany
- India signed in 1993, 190 members



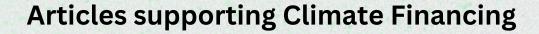
"Reviewing Climate Financing at Previous COPs"

COP1 - Berlin, Germany, 1995

COP3 - Kyoto, Japan, 1997 (force-2005) - based on CBDR (India ratified in 2002)(USA never ratified) (binding limits on developed countries - about 5% by 2012)

COP8 - New Delhi, 2002 - New Delhi Declaration – discussion on aid from developed countries COP15 - Cophagen, Denmark, 2009 (Ask for100Bn\$ per annum to developing countries) (earlier 30Bn\$)

COP21- Paris, France, 2015 (to limit global warming below 2 degrees, prefer 1.5) Paris Agreement (common to all countries) (Legally Binding) (Effect - 2016)





- 1. Article 6 of the Paris Agreement outlines how nations can engage in voluntary collaboration to achieve their climate objectives. This provision facilitates global cooperation in addressing climate change and accessing financial assistance for developing nations.
- 2. Article 9 of the Paris Agreement mandates that developed nations must furnish financial resources to aid developing nations in both mitigation and adaptation efforts, in line with their existing commitments under the Convention.
- 3. Article 28 of the Paris Agreement states that any party can withdraw from the agreement by giving written notification to the Depositary at any time after three years from the date it has entered into force for that party







USA AND UNFCCC



- 2017- President Donald Trump declared that the United States would discontinue its involvement in the 2015 Paris Agreement on climate change mitigation, arguing that the accord would harm the U.S. economy and leave the country at a lasting disadvantage.
- Until the withdrawal became effective, the United States was bound to uphold its obligations under the Agreement, including the duty to continue reporting its emissions to the United Nations.
- 2020 The withdrawal became effective
- Effect Trump's choice to withdraw faced strong condemnation both domestically and internationally, with environmentalists, religious groups, business leaders, and scientists all expressing disapproval. A majority of Americans were against the withdrawal.
- The decision also had repercussions for other nations, as it reduced the United States' financial support for the Green Climate Fund. This termination of \$3 billion in funding had a significant impact on climate change research and hindered society's ability to achieve the goals set out in the Paris Agreement.
- 2021 After Joe Biden came to powerm he vowed to rejoin the agreement The United States formally rejoined the Paris Agreement on February 19, 2021, 107 days after the withdrawal took effect.

What actions did USA take after re-joining the Paris Agreement?

President Biden has announced a \$2 trillion clean energy and green jobs plan, aiming to achieve net-zero emissions by 2050. He has signed executive orders to review and reverse Trump-era policies that weakened regulations on methane emissions, fuel economy standards, and more. Biden has also halted fossil fuel leasing on federal land, directed agencies to reduce fossil fuel subsidies, and reinstated science in the fight against climate change.











INDIA AND CLIMATE FINANCING

India's Nationally Determined Contributions at COP21 in 2015 Paris Agreement

- 1. 33-35% by 2030 over 2005 levels
- 2. Share of non-fossil fuels to 40% by 2030 175GW of energy by 2022 (renewable energy)
- 3. Enhancing forest cover 2.5-3 billion tonnes of CO2 absorb

India's Nationally Determined Contributions at COP26 - Glasgow, United Kingdom - "Amrit Tatvas" - 5 climate commitments

- 1.500GW by 2030
- 2. By 2030 India will fulfil 50% energy requirement
- 3. net projected carbon emission by 1Bn tonnes by 2030
- 4. 2070 "Net Zero" Carbon emissions
- 5. By 2030, India will bring down carbon intensity of its GDP by more than 45%

COP27- Sharm el- Sheikh, Egypt, 2022, Theme "Implementation COP"

- India has submitted long term low emission development Strategy (LT-LEDS) Bhupendra Yadav
 represented India
- 2. Mangrove alliance launched by UAE (100 million mangroves by 2030, a pledge made at Cop26) (Cop27 extended to other countries) and Indonesia. (MAC Mangrove Alliance for climate) (Intergovernmental alliance)

COP28- UAE, 2023 The Climate Finance Leadership Initiative (CFLI), India, has made a significant announcement during the United Nations Climate Change Conference of Parties (COP28) in Dubai, revealing climate financing solutions with the potential to generate approximately \$6.5 billion.









COP28: CFLI India announces climate finance solutions in India; potential to mobilise over \$6.5 billion

- CFLI India's climate solutions, spanning e-mobility, circular economy, green hydrogen, and renewables, are tailored to sectors in line with the Indian government's climate agenda and have the potential for nationwide and global scalability.
- These solutions are expected to attract private investments, contributing to the \$10.1 trillion required to achieve India's net-zero emissions goal by 2070 over the next ten years.
- Tata Group and Larsen & Toubro are exploring opportunities to work with the World Bank to improve municipal finance in Indian cities.
- GIC Private's affiliate signed an agreement with AM Green, set up by Greenko's founders, and Gentari, the clean energy division of Malaysia's oil company Petronas. This partnership aims to produce 5 million tonnes per annum (MTPA) of green ammonia by 2030. This is expected to accelerate efforts to achieve net zero targets in India as well as in OECD markets.

CLIMATE FINANCING IN GLOBAL SOUTH

"These countries face the highest climate impact and need finance for climate transition to help them develop, without adding significantly to the stock of greenhouse emissions. The current climate finance is inadequate, and 'additionality' for funds is crucial — existing pools cannot be repackaged via creative accounting, said CSE's latest report — Beyond Climate Finance." Global South countries bear the brunt of climate change-related losses and damages. These nations require financial support for transitioning to climate-friendly development paths that do not substantially increase greenhouse gas emissions. However, they face financial challenges, including a mounting debt crisis. In fact, many low and middle-income countries spend more on servicing their debts annually than what would be required to meet their nationally determined contribution goals.

Conclusion

- It is imperative for governments to place a strong emphasis on disaster resilience and adaptation to climate change. These are not just buzzwords or abstract concepts; they are critical components of our collective survival and the well-being of our planet.
- Building resilience to disasters and adapting to climate change requires a multi faceted approach that involves governments, communities, businesses, and individuals. It involves investing in infrastructure that can withstand extreme weather events, implementing land-use planning and zoning regulations that take into account climate risks, and promoting sustainable practices that reduce greenhouse gas emissions and protect natural resources.
- We have the means to save our future and our planet. We have the knowledge, the technology, and the resources. What we need now is the political will and the collective action to use them effectively. It is time for governments to prioritize disaster resilience and adaptation to climate change, and to work together with all stakeholders to build a more sustainable and resilient future for all.













GREEN NEWSLETTER

Designed By: Navya Sinha

O2
EDITION