



NEWSLETTER #28

THE RAVEN

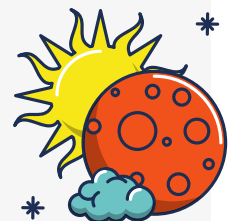
“

We have forgotten how to be good guests, how to walk lightly on the earth as its other creatures do

~Barbara Ward

”

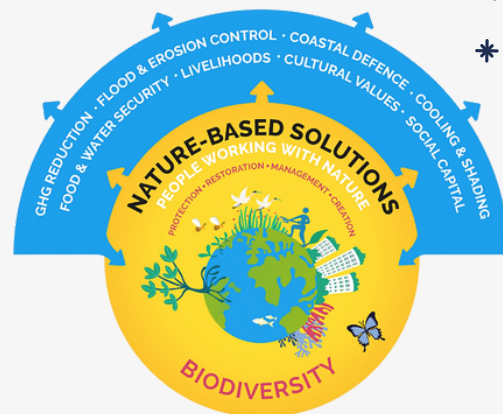
ARE ‘NATURE BASED SOLUTIONS’ THE BEST FIX FOR CLIMATE CHANGE?



Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, but since the 1800s, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels (like coal, oil, and gas), which produces heat-trapping gases.

Impacts of Climate change are hotter temperatures, more severe storms, increased drought, rising ocean levels, loss of species, not enough food, more health risks, poverty and displacement and many more.

There are plenty of solutions to climate change. Most of them are categorized as Nature-based solutions and Technology based solutions.



- Nature-based solutions-Nature based solutions also called “natural climate solutions,” involve conserving, restoring, or better managing ecosystems to remove carbon dioxide (CO2) from the atmosphere.

Examples include allowing forests to regrow, restoring coastal wetlands, and switching to restorative agricultural practices, such as cover crop rotation, that support healthy soils. These ecosystems reduce climate change by capturing CO2 from the air and sequestering it in plants, soils, and sediments.

- Technology-based solutions- It includes Invest in renewable energy, Switch to sustainable transport, Recycling waste, Keep fossil fuels in the ground and Reduce how much people consume.

But the main question is which is the best way to deal with climate change?

Nature based solutions are very effective and cost efficient. Nature-based solutions for climate harness the power of nature to reduce greenhouse gas emissions and also help us adapt to the impacts of climate change. They are win-win solutions that involve protecting, restoring and sustainably managing ecosystems to address society's challenges and promote human well-being. Forests are probably the most well-known nature-based solution for climate change. Restoring upland forests can help the world's 534 largest cities regulate water flows and manage more extreme floods while saving an estimated \$890 million each year, according to The Global Commission on Adaptation. But they are effective over a long period such as leaving a land to re-grow as forest takes years while on the other hand using technology and human aid to regrow forest on the same land can be achieved on a fast pace.

Technology based solutions are can be more effective as compared to Natura based solutions but these are more expensive too. Like investment in renewable sources requires lot of money for making equipment and harnessing renewable energy. Technology based solutions requires a lot of mental hardship as it involves regularly improving technology and innovation to deal with new and increasing problems related to climate change.

At the end, all we can say is that both methods have their own benefits and harms.

CHINA DISCOVERS LITHIUM DEPOSITS IN THE HIMALAYAS. IS IT DESTINED TO BE A BLESSING OR A CURSE?



Recently, Chinese scientists have discovered "super-large" deposits of lithium near Mount Everest. Is this deposit going to be a boon for the rapidly growing EV industry, as it could provide much-needed supplies of the lithium element? Or it might turn into a nightmare, uprooting millions of lives and causing an environmental calamity.



Lithium is a key element in the production of batteries, especially in EVs. China is already one of the world's largest producers of lithium, and the Chinese believe that the site could possibly produce a million tonnes of lithium oxide. Despite the fact that mining of various metals has been carried out in the Himalayas for millennia scientists around the world believe mining the recently discovered lithium deposits would be an energy-intensive and water-intensive operation. The Himalayan region is one of the most vulnerable ecosystems to global warming, and it also serves as a key supply of water for billions of people living downstream in South and Southeast Asia. Experts also believe that extensive mining in the region might cause freshwater stress, potentially affecting China's two primary freshwater sources, the Yangtze and the Yellow rivers. Furthermore, any mining activity could potentially affect the local water resources as there's a danger of contamination.

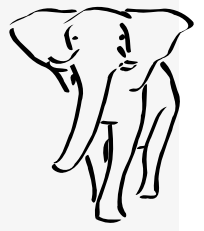
Chinese experts believe that the mining location is convenient and far away from Mount Everest's core natural reserve. Furthermore, because the ore body is visible, no significant excavation is required, although many facts about the mine are still unknown as it is still in the pre-investigation stage.

BIHAR ON THE WAY TO PREPARE EXCLUSIVE ENVIRONMENTAL PLANS FOR ALL DISTRICTS!



The Bihar government is on the way to prepare exclusive environmental plans for all the 38 districts of the state to address the local environmental issues said by the member secretary Chandrashekhar of Bihar State Pollution Control Board. Aiming to create a National Environment Plan, the National Green Tribunal (NGT) was formed to tackle environmental issues in the country and UTs. The agency, which the BSPCB has engaged for the district plan, has started to conduct surveys of pollution levels, sources of its impacts over life and environmental areas. Besides this, the Environmental plan will also be having strategies to bring down the pollution graph. Issues regarding waste management, domestic sewage, mining and noise pollution will also be addressed.

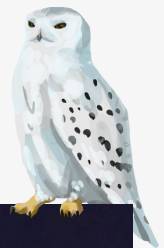
OIL PALM EXPANSION IN NORTHEAST INDIA GIVES RISE TO HUMAN-ELEPHANT CONFLICT CONCERNS!



Assam's Goalpara region has witnessed human-elephant conflicts. It is considered as the most affected state district with around 20 people losing lives in encounters by elephants last year. This is the first district to start oil palm cultivation with the maiden plantation in Khungkrajani village. On December 19, 2021 an adult female elephant was found dead in a banana plantation, around 1.5 km from the village. Goalpara is considered to be one of the worst affected districts for human-elephant conflict in Assam.

According to the reports, 20 people and around 5 jumbos died in the same period. Data shows 76 people were killed by elephants. Apart from this, Goalpara district is also the pioneer in oil palm cultivation in Assam. Similar encounters were seen taking place in the regions of Arunachal Pradesh. According to experts, expansion of oil palm in northeast India that encroaches on forest land to meet the goals of the Indian government under its National Mission on Edible Oils-Oil Palm may lead to more encounters with elephants in northeast India.

SAVING OUR FAVOURITE HARRY POTTER CREATURE!



Owls are one of nature's most mysterious creatures. Despite their enormous ecological importance, these endangered birds are captured in great numbers for sacrifice and usage in a variety of ceremonies encouraged by local mystic practitioners. TRAFFIC and WWF-India recently released an identification tool to highlight common concerns and allow for accurate owl identification. TRAFFIC was founded in 1976 by WWF and the IUCN as a wildlife trade monitoring network to gather data, analyse it, and provide suggestions to help people make better decisions about wildlife trafficking.



Law enforcement officials have been given identification cards to help them precisely identify 16 common owl species involved in criminal commerce. The ID cards, which will be available in both English and Hindi, will be handed free of charge to wildlife law enforcement organisations around the country.

The new ID tools, co-authored by Saket Badola, Head of TRAFFIC's India Office, and Merwyn, provide critical information on the species' legal status, habitat, and distribution. They offer helpful hints for recognising owls at the species level as well as highlighting common hazards.

Richa Kedia crafted the watercolour pictures of the 16 owl species. The ID card is a downloadable booklet with owl pictures, significant attributes of each species, distribution in India, and size comparisons with house sparrows and crows for simple identification.

Ravi Singh, secretary general and CEO, WWF-India, adds, "Owls play an essential role in our ecosystem. They enhance agricultural productivity by keeping a check on the rodent populations. Unless trafficking and illicit trade of owls is controlled, the owl populations will remain under threat. Adequate conservation and protection efforts for owls and other endangered species is crucial for maintaining a healthy ecosystem".

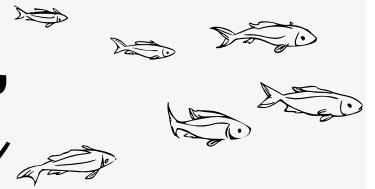


CUTTING HCF'S TO COOL THE EARTH:

To reduce global warming and hold it to 1.5 degree Celsius, we need to speed up the phase-down of HCF refrigerants under the Montreal protocol. Cooling technologies such as air conditioners, refrigerators, heat pumps etc. is probably degrading the environment of the earth since today's aircon commonly relies on chemicals called HCFs (hydrofluorocarbons), which are very powerful greenhouse gases. HCFs have been used to replace ozone depleting substances, and their emissions have increased rapidly in the past two decades.

To meet Paris climate goals, the world now need to stop HCF quickly, this process could reduce power consumption substantially, bring many benefits such as lower pollution. HCFs can be replaced by various gases that have far lower climate impact per kilogram, such as ammonia, CO2 and hydrocarbons such as propane. The problem is that HCF emissions lag years behind consumption. They can leak out of cooling devices during manufacture and use, and when equipment is scrapped. The study of IIASA projects that, if left uncontrolled, HCF emissions from 2019 to 2050 would have amounted to more than 92 billion tons CO2 equivalent. Current ambitions for HCF emissions reduction is not able to meet the Paris Agreement's goal thus to make it more effective options involves all countries not only hitting 95% but making accelerated deep cuts before 2050. This early move would be an opportunity to replace old cooling equipment with more efficient hardware. This could save up to 20% of expected future global electricity consumption, which would double the climate benefits of the HCF phase-down, reduce air pollution, improve energy access and cut consumer energy bills.

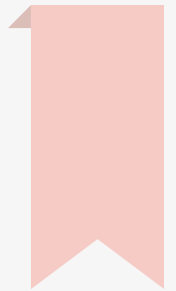
BEACON OF HOPE



A very spectacular new-to-science species of fish has been named 'Cirrhilabrus finifenmaa' by Mr Ahmed Najeeb, a Maldivian scientist

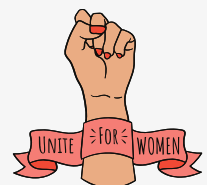


RECOMMENDATION TO READ AND ATTEND



When you come across the term Greenpeace, you often correlate it with warriors of the environment who fight for justice, preservation of wildlife and preventing any sorts of environmental abuses. Here's a story about brave female warriors who stood against the negative factors: want to read more? Click on **Read it here** to continue reading:

Read it here!



**WHAT DID YOU LIKE ABOUT THIS
FORTNIGHTLY'S- THE RAVEN?
WHAT DID WE MISS?
LET US KNOW WHAT YOU THINK:**

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About EnviSAGE

EnviSAGE- the Environmental Society of SGND Khalsa College is a group of highly motivated environment conscious and prudent members who believe in the maxim, 'Our actions today will impact the tomorrow of others'. We consider the earth and all its resources as a precious gift, not to be taken for granted, but to be respected, preserved and nurtured. We feel that we are responsible and accountable for our activities and behavior towards the environment and strive to share the same enthusiasm, concern, knowledge, and sense of gratitude with others as well. Through our activities, we aim to empower individuals in terms of knowledge about environmental issues and challenges that we are currently facing.

Curated with love by

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