PRAKRITI SANRAKSHAN
Newsletter
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From the Editor's Desk

January – March 2026 Issue

Dear Readers,

Welcome to the January–March 2026 edition of Prakriti Sanrakshan. As we step into a new year, this issue brings into focus some of the most critical environmental and socio-ecological concerns shaping our present and future.

We begin with an urgent discussion on the devastating effects of capturing undersized hilsa in the Bay of Bengal. This unsustainable practice threatens not only the species itself but also the ecological balance and the livelihoods dependent on it. Conservation efforts must be strengthened through awareness, policy, and community participation.

In Voices from the Islands, we document rich tribal knowledge alongside Prof. Suparna Sanyal Mukherjee. These narratives emphasize the importance of preserving indigenous wisdom systems, which offer sustainable solutions deeply rooted in harmony with nature.

Our exploration of India's bidi industry sheds light on the intertwined realities of labor, health, and environment, urging a re-evaluation of sustainable livelihoods in vulnerable communities.

The feature on vanishing vultures draws attention to a silent ecological crisis. As these vital scavengers decline, the consequences ripple across ecosystems, reminding us of the interconnectedness of all life forms.

We are pleased to announce the successful organization of the Hybrid Mode International Conference on Energy, Environment, Water, Agriculture, Sustainability and Health: Innovating for a Resilient Future in the Modern World, held on 26–27 March 2026 at SRM Institute of Science and Technology (SRMIST), Chennai, along with the 7th Annual Meet of Save The Environment (STE). This collaborative platform brought together researchers, practitioners, and policymakers to exchange ideas and foster innovative solutions for global sustainability challenges. We are delighted to share glimpses of this enriching event, which was successfully conducted in both online and offline modes, ensuring wide participation and engagement. The hybrid format enabled inclusive dialogue and meaningful collaboration across geographical boundaries.

Upcoming Initiatives:
We are also organizing a health camp aimed at providing essential medical support to underserved communities and request your generous support through donations to meet medical and logistical needs. Your contribution will help make quality healthcare accessible and ensure the success of this noble initiative.

Additionally, we are excited to announce the upcoming event FRONTIERS IN ENVIRONMENTAL SUSTAINABILITY, CLIMATE STEWARDSHIP, AND BIOTECHNOLOGY (FESCBT-2026): COMMEMORATING EARTH DAY – "Planet vs. Plastics".

This issue stands as a reminder that environmental stewardship requires collective effort, informed dialogue, and sustained action. Through research, awareness, and collaboration, we can work toward a more resilient and sustainable future.

We hope these insights inspire you to engage more deeply with the pressing environmental challenges of our time.

With warm regards,

Divya Bhardwaj
Chief Editor

ABOUT US

Save the Environment (STE)

SAVE THE ENVIRONMENT (STE) is the organization that aims to spread awareness to the society about environment, health and water. It was founded and registered on 19th November 1990. STE has collaborated with various organizations in the past 33 years such as All India Institute of Hygiene & Public Health, AIIH&PH and India Canada Environment Facility, DRDO, Ministry of Defence, Department of Science and Technology (DST), Indian Institute of Management (IIM), Ahmedabad to mitigate the effects of arsenic and provide arsenic-free drinking water.

The vision of the society is to protect present and future generations from various Environmental Hazards. The NGO has been actively organizing various interactive sessions such as conferences (National and International), workshops, seminars and awareness programs including poster competitions, quiz competitions, science exhibitions and webinars among the future generations.

HUMBLE APPEAL for CSR FUNDS

To continue your Kind support for clean water supply and sanitation facility project at the STE adopted village Bankanali, Block Puncha, Distt. Purulia

Save The Environment (STE) extends its gratitude and thankfulness for your benevolent support which has made possible the installation of a drinking-cum-wash water unit at the cost of about Rs four and a half lakh (Rs. 4.5 Lakh only) in the first phase of the subject project at STE adopted village Bankanali, Puncha Block, Distt. Purulia, West Bengal. Many households, in dire need of proper water facilities, are somewhat benefitting from the same.



However, a long path remains ahead of us in order to complete the pursuit undertaken. In this endeavour, we plan to provide various water supply units in adjoining areas, rejuvenate and restore the available ponds, create the rain water harvesting systems, reuse of waste water, plantation, Electrification in the village using Solar energy and also to install toilets in the school and other places to be used by people. Looking forward for your kind support to complete the above project.

In this regard, we at STE, earnestly request all the citizens, corporates, life members of STE and patrons to kindly come forward and support for this noble cause. Your generous donation will be a pillar for us and will certainly enable us to bring a smile to several underprivileged persons.

Details of the proposed project are :

ACTIVITIES
Restoration of ponds
Installation of Rain Water Harvesting Systems
Solar Electrification in the Houses and roads
Distribution of drinking water by pipe line in the village
Constructions of toilets in school, houses and other public places and plantation etc.

Looking forward to receiving your generous support.

Contact details:
Phone: 9871372350; 9830779260 Email: info@stenvironment.org
Account details for donating funds:
ONLINE PAYMENT:
Account Name: **Save The Environment**
Account Number: **60475457174**
Bank and Branch: **Bank of Maharashtra, Kalkaji, New Delhi-110019**
IFSC Code: **MAHB0000974** OR
GOOGLE PAY to: **Mrs. Chhanda Basu;** Mobile **9830779260**

HOW CAPTURING UNDERSIZED HILSA IS DEVASTATING THE BAY OF BENGAL FISH POPULATION

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Widespread capture of undersized hilsa (locally called jatka or khoka) along the northern Bay of Bengal — especially in coastal West Bengal and adjacent marine/estuarine areas — is reducing recruitment, degrading spawning stock, and threatening the long-term productivity of the hilsa fishery. Weak enforcement, economic pressure on fishers, and the use of fine-mesh/illegal gear keep juvenile mortality high, undermining both ecology and livelihoods. Removing the juveniles before they mature prevents them from returning to spawn, so fewer adults reproduce the next season — a classic recruitment collapse that, repeated year after year, shrinks the population.

Juvenile hilsa (< ~200–500 g, often <25 cm) are regularly landed and sold in markets in West Bengal and other Indian coastal areas despite formal bans and mesh-size rules intended to protect them. Markets are often "flooded" with khoka during open seasons.

Fishers use fine-mesh gillnets and trawls that catch juveniles en masse; enforcement of seasonal/size bans is patchy. Economic need and demand (festivals, city markets) push continued harvesting of small fish.

Removing large numbers of hilsa juveniles reduces the number surviving to adulthood; this immediately lowers future spawning biomass. Over time, stock abundance declines. Heavy juvenile removal skews the population toward fewer, older fish — reducing resilience to environmental variability. Hilsa are anadromous (sea ↔ river) and rely on estuarine nursery habitats; heavy coastal fishing and habitat stressors compound the damage from juvenile removal from natural habitats.

The key socio-economic factors keeping undersized catch high are listed below:

High market demand (urban/seasonal festivals).

Poverty and lack of alternative income for fishers.

Use of illegal/fine-mesh nets and long trawls in estuaries.

Weak or inconsistent enforcement of size bans and closed seasons.

The easy cash from selling many small fish benefits middlemen and some fishers. However, due to declining catches, lower incomes, and increased dependence on imported hilsa from adjoining Bangladesh and Myanmar, local stocks fail to recover, harming artisanal fishing communities. Bangladesh has very successfully implemented strict seasonal closures, no-take sanctuaries for jatka, mesh-size controls, and conditional cash incentives for fishers; these measures, combined with monitoring, have helped revive parts of its hilsa fishery. The contrast shows that policy, enforcement, and fisher incentives can rebuild the stock.

Some of the conservation efforts for hilsa need strict enforcement of size limits and closed seasons for estuarine/coastal hilsa fishing, coupled with visible patrols and market checks. Banning or tightly regulating fine-mesh nets in nursery/estuarine zones and controlling trawler effort in migratory corridors are also important. Community co-management, together with incentives, could include conditional cash transfers, gear buybacks, and livelihood alternatives (e.g., aquaculture, portering, mangrove-related jobs) to reduce poaching of juveniles. Protected nursery sanctuaries with local participation and seasonal no-take rules, modeled on successful zones in the region, are essential. Market interventions such as traceability systems, market bans on undersized hilsa, consumer awareness campaigns (avoid buying khoka), and penalties for sellers are also needed. Regular stock assessments, size-structure monitoring, and research on habitat are necessary to guide adaptive management.

Capturing undersized hilsa is not only a short-term harvest problem; it removes the very next generation that would sustain the fishery. Without rapid, enforceable measures that combine regulation, fisher incentives, and market controls, coastal India risks a long-term decline of hilsa in the northern Bay of Bengal, with serious ecological and economic consequences. The Bangladesh experience shows recovery is possible when policy, enforcement, and fisher livelihoods are addressed together.

VOICES FROM THE ISLANDS: DOCUMENTING TRIBAL KNOWLEDGE

Prof. Suparna Sanyal Mukherjee and S. K. Basu
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Prof. Dr. Suparna Sanyal Mukherjee is an Indian social anthropologist, academic, and social worker known for her research on tribal communities, ethnomedicine, and community development. She has been associated with academic institutions such as Seacom Skills University, where she has served as a faculty member and academic coordinator. Her academic background includes advanced studies in social anthropology, and her research interests focus on indigenous communities, tribal welfare, and traditional knowledge systems.

Research interest in indigenous communities: Over the years, Prof. Mukherjee has worked extensively on marginalized tribal groups across India. Her scholarly work examines issues such as the impact of the Indian Forest Act on tribal communities, malnutrition, social exclusion, and the preservation of indigenous traditions. Her doctoral research highlighted the socio-economic struggles of forest-dwelling tribes and the effects of state policies on their traditional livelihood systems.

Her academic publications and research papers address topics such as tribal health, community development, and socio-economic transformation. Several of her works focus on improving the quality of life of tribal populations through community participation and sustainable development strategies.

Bioresource survey of the Andaman Islands: One of Prof. Mukherjee's notable initiatives is her work related to the indigenous tribes of the Andaman and Nicobar Islands. In September 2025, she led a research team from the NGO Howrah Suparna in conducting a bioresource survey across the Andaman Islands. The survey aimed to document biodiversity, ethnomedicinalknowledge, and the cultural traditions of indigenous communities living in the region.

The research explored the ecological richness of the islands, which are home to dense tropical forests, mangroves, coral reefs, and numerous endemic species of plants and animals. The team documented the presence of traditional tribal communities such as the Great Andamanese, Jarawa, Onge, and Sentinelese, who maintain unique cultural traditions and deep ecological knowledge of the forest environment.

Ethnomedicinal studies: A significant aspect of Prof. Mukherjee's work involves documenting traditional medicinal knowledge used by Andaman tribes. These communities rely heavily on local plants for healthcare, treating ailments such as fever, wounds, digestive disorders, respiratory diseases, and snake bites. The research highlighted several medicinal plants used in tribal medicine and emphasized their potential importance for modern pharmaceutical research.

The documentation of these practices contributes to preserving indigenous knowledge systems that are often transmitted orally across generations. It also provides valuable scientific data for ethnobotany, conservation biology, and sustainable healthcare development.

Conservation and cultural documentation:
Prof. Mukherjee's research team also studied the socio-ecological relationship between tribal communities and their natural environment. Indigenous groups in the Andaman Islands traditionally practice sustainable resource use and maintain a respectful relationship with nature. By documenting their customs, hunting traditions, and environmental ethics, the research highlights the role of tribal communities as custodians of biodiversity.

Her work also raises awareness about emerging threats to the fragile island ecosystem, vanishing tribes, and medicinal plants, including rapid tourism growth and overexploitation of natural resources. The findings of the survey are intended to support conservation initiatives and policy recommendations for protecting both the environment and the cultural heritage of the indigenous tribes.

Significance of her work: The work of Prof. Suparna Sanyal Mukherjee is important for several reasons:
It documents endangered indigenous knowledge systems of remote tribal communities.

It contributes to biodiversity conservation and ethnobotanical research.

It highlights the socio-economic challenges faced by tribal populations.

It promotes awareness about sustainable development and environmental protection in sensitive ecosystems.

Prof. Suparna Sanyal Mukherjee's research with the Andaman tribes represents a significant effort to bridge anthropology, ecology, and social development. Through field surveys, academic publications, and community-oriented initiatives, she has contributed to the documentation of tribal traditions, ethnomedicinal practices, and biodiversity resources of the Andaman Islands. Her work not only enriches academic understanding of indigenous cultures but also supports the broader goals of conservation and sustainable development in one of India's most ecologically unique regions.

INDIA'S BIDI INDUSTRY: SMOKE, WORK, AND SURVIVAL

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Bidis (also spelled bidi, biri) are small, hand-rolled smoked products made from local tobacco (Nicotiana tabacum) wrapped in a leaf (typically tendu) in India. Cheroots / regional “Indian cigars” (e.g., Trichinopoly cheroot, Pataka bidi) are a different traditional product made from whole tobacco leaves and rolled tobacco; both have long local histories and form an important low-cost segment of India's tobacco market. The bidi industry is overwhelmingly small-scale and geographically dispersed, concentrated in a handful of states where tobacco and tendu leaves are available; annual production estimates range in the hundreds of billions. Annual bidi stick production estimates range widely (≈320 billion — 1.2 trillion sticks) due to informal production measurement challenges.

A bidi typically weighs around ~0.2 g of dark, sun-dried and processed tobacco flakes (finely cut/crumbled tobacco) wrapped in a tendu (Diospyrosmelanoxylon) or similar leaf and fastened with a thread or adhesive at one end. Some bidis are flavored or sweetened commercially, but the basic components are tobacco, the wrapper leaf, and the binding. Cheroot / regional “cigar” (e.g., Trichinopoly in Tamil Nadu and Pataka bidi in West Bengal): larger, often handmade rolls of tobacco (sometimes whole-leaf wrappers), produced in specific regions and closer to small cigars in construction. These use aged tobacco leaf and different rolling techniques than bidis.

Bidi manufacturing operates across many Indian states; however, production is highly concentrated. Studies and surveys show operations across ~17 states with >95% of output concentrated in about 10 states. Major producing/processing states include West Bengal, Uttar Pradesh, Bihar, Maharashtra, Andhra Pradesh, Karnataka, Tamil Nadu, Odisha, Gujarat, Madhya Pradesh, Kerala, among others — many of these overlap with major tobacco-growing areas. Production also occurs in numerous small units and home-based workshops.

These places provide the necessary raw materials such as availability of tendu leaves (for wrappers) and local tobacco crops (Andhra Pradesh, Karnataka, Gujarat, etc.),

making many states natural manufacturing centres. Tobacco curing and local leaf supply reduce transport costs. Low-cost labour and the cottage industry model have helped bidi rolling; it is largely labour-intensive, often performed by home workers (frequently women) or small units. This makes it economically viable in areas with cheaper labour and established rolling traditions. The industry's cottage-scale structure keeps capital requirements low.

Huge volume, low unit price: bidis are produced in the hundreds of billions of sticks annually by several estimates. Recent back-of-the-envelope and peer-reviewed estimates place annual bidi production anywhere from ~320 billion sticks up to nearly 1.2 trillion, depending on method and data source — the wide range reflects difficulties measuring informal, home-based production. Historically, bidis have accounted for a large fraction of India's smoked-tobacco consumption (NTCP/WHO reports cited bidis as ~40–48% of tobacco consumption in some assessments), though cigarette share and smokeless products also matter.

India's overall tobacco market is large (industry reports put tobacco production at hundreds of thousands of tonnes; market-value and tonnage estimates vary by year). Organized tobacco (cigarettes, exports) is concentrated in different states than much of bidi rolling. Mostly small firms and home workers: the bidi sector includes many small manufacturers, contractors, and extensive home-based rolling networks. Large employers are rare; most production is in small/unregistered units. Studies estimate millions of workers dependent on bidi rolling and allied activity (estimates vary by source/year but commonly cite multi-million employment due to cottage production). This creates a strong livelihood component that sustains the industry despite health/regulatory pressures. Bidis are subject to government regulation and taxation, but enforcement is complicated by the informal nature of production. Public-health agencies (NTCP/MoHFW) highlight bidis' major role in India's tobacco consumption.

Bidi smoke contains many of the same harmful chemicals as cigarette smoke; because bidis often deliver more tar and carbon monoxide per stick and lack filters, they are not a safe alternative. Chemical analyses of mainstream bidi smoke document toxic constituents. Bidis are a high-volume, low-value, labour-intensive tobacco product made from local tobacco and tendu leaves; manufacturing is concentrated in states with raw material and low-cost labour, and production largely occurs in small/home units. The scale is enormous (hundreds of billions of sticks annually by many estimates), which has large public-health and economic livelihood implications. Any policy or commercial analysis must account for the informal, home-based nature of production and the multiple states involved.

VANISHING VULTURES: THE SILENT GUARDIANS OF OUR ECOSYSTEM

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India is home to nine species of vultures, many of which are under threat due to habitat loss, poisoning, and declining food availability. These species can be broadly categorized into two groups: resident vultures and migratory vultures. Vultures play a crucial role as scavengers, efficiently disposing of animal carcasses and preventing the spread of diseases. The absence of vultures has led to an increase in feral dogs and other scavengers, contributing to the spread of diseases like rabies and anthrax, and increasing carcass disposal costs for communities and governments. Efforts to protect these birds are crucial for India's biodiversity conservation.

Resident Vultures (7 species)

These species are native to India and live year-round in various parts of the country:

White-rumped Vulture (Gyps bengalensis)
Status: Critically Endangered
Once widespread, their population has drastically declined due to the veterinary drug diclofenac.

Indian Vulture (Gyps indicus)
Status: Critically Endangered
Found in central and peninsular India.

Slender-billed Vulture (Gyps tenuirostris)
Status: Critically Endangered
Inhabits the northern and northeastern regions of India.

Himalayan Griffon Vulture (Gyps himalayensis)
Status: Near Threatened
Found in the Himalayan range; can occasionally migrate to the plains.

Red-headed Vulture (Sarcogyps calvus)
Status: Critically Endangered
A striking species with a red head; found in forests and open grasslands.

Egyptian Vulture (Neophron percnopterus)
Status: Endangered
Known for its smaller size and yellow face; widespread across India.

Long-billed Vulture (Gyps indicus)
Status: Critically Endangered
Common in central and southern India.

Migratory Vultures (2 species)
These species visit India during certain seasons.
Cinereous Vulture (Aegypius monachus)
Status: Near Threatened
A large, solitary vulture seen in the northern plains during winter.

Eurasian Griffon Vulture (Gyps fulvus)
Status: Least Concern
Migrates to northern India during the winter months.
Population Decline

The vulture population in India saw a catastrophic decline in the 1990s, primarily due to the use of diclofenac in livestock. When vultures consumed the carcasses of animals treated with this drug, they suffered fatal kidney damage. Steps like banning diclofenac in veterinary use and setting up Vulture Conservation Breeding Centres (VCBCs) have been implemented to save these species. Urbanization, deforestation, and reduced availability of food sources are additional ongoing threats. The alarming decline of vulture populations across India, often referred to as the "vulture crisis," is attributed to several interrelated factors:

The primary driver of the vulture population collapse in India is the widespread use of the veterinary drug diclofenac. Vultures feeding on carcasses of livestock treated with diclofenac suffer from acute kidney failure, leading to their death. This has led to declines of over 95% in some vulture species. The destruction of natural habitats due to urbanization, agriculture, and deforestation has reduced nesting and foraging areas for vultures, exacerbating their decline. Changes in livestock disposal practices, such as the shift to carcass burial or incineration, have reduced the availability of carrion, their primary food source.

Vultures may also ingest toxic substances from carcasses of animals exposed to pesticides or other chemicals, further contributing to mortality. Human activities near nesting sites, such as logging, infrastructure development, and tourism, disrupt breeding and nesting behaviors. Vultures sometimes ingest poison intended for other animals, such as predators like leopards or jackals, which can be fatal. Altered weather patterns and extreme climatic conditions affect the availability of food and suitable nesting habitats.

Consequences of Vulture Decline:

India has implemented various measures, such as banning the veterinary use of diclofenac in 2006, establishing vulture breeding centers and conservation programs, promoting safer alternatives to diclofenac, such as meloxicam, and raising awareness about the importance of vultures in ecosystems. Despite these efforts, ongoing monitoring and stricter enforcement are needed to reverse the population decline and ensure the survival of vulture species in India.

Some of the challenges of successful vulture conservation are slow breeding rates. Vultures reproduce slowly, with long intervals between chicks. Habitat destruction, poisoning, and human-wildlife conflict persist, together with dependence on limited funding. While progress has been made, particularly in India and Europe, vulture breeding programs still face challenges in fully restoring populations to sustainable levels. However, they play a critical role in ensuring the survival of these vital scavenger species.

Vulture Breeding Program

The vulture breeding program is a conservation initiative designed to protect and increase the population of critically endangered vulture species. The Vulture Conservation Breeding Programme, initiated by the Bombay Natural History Society (BNHS) in collaboration with the Government of India, has set up breeding centers in places like Haryana, West Bengal, Rajasthan, and Madhya Pradesh. The key objectives of vulture breeding programs have been to study vulture ecology and implement measures to mitigate threats, spread education and awareness about vultures among the public and their importance to our ecosystems, establish healthy vulture populations under captivity, and their subsequent release in the wild.

Suggested readings

Darcy L Ogada, Felicia Keesing, Munir Z Virani (2012) Dropping dead: causes and consequences of vulture population declines worldwide. *Annals of the New York Academy of Sciences*. 1249(1): 57–71.

Evan R Buechley, Çağan H Şekercioğlu (2016) The avian scavenger crisis: Looming extinctions, trophic cascades, and loss of critical ecosystem functions. *Biological Conservation*. 198: 220–228.

Brian J Dermody, Colby J Tanner, Andrew L Jackson (2011) The Evolutionary Pathway to Obligate Scavenging in Gyps Vultures. *PLoS One*. 6(9), e24635.

Sonja C Krüger, Andre Botha, William Bowerman, Brent Coverdale, Meredith L Gore, Linda van den Heever, L Jen Shaffer, Hanneline Smit Robinson, Lindy J Thompson, Mary Ann Ottinger (2022) Old World vultures reflect effects of environmental pollutants through human encroachment. *Environmental Toxicology and Chemistry*. 41(7): 1586–1603.

Laura Gangoso, Rosa Agudo, José Daniel Anadón, Manuel de la Riva, Ahmed SaeedSuleyman, Richard Porter, José Antonio Donázar (2013) Reinventing mutualism between humans and wild fauna: insights from vultures as ecosystem services providers. *Conservation Letters*. 6(3): 172–179.

Vibhu Prakash, Toby H Galligan, Soumya S Chakraborty, Ruchi Dave, Mandar D Kulkarni, Nikita Prakash, Rohan N Shringarpure, Sachin P Ranade, Rhys E Green (2019) Recent changes in populations of Critically Endangered Gyps vultures in India. *Bird Conservation International*. 29(1): 55–70.

NM Ishwar, Saudamini Das (2025) Economics of conserving endangered birds: the case for Gyps vultures in India. *Environment, Development and Sustainability* 27(8): 18775–18797.

Vibhu Prakash, Hemant Bajpai, Soumya S Chakraborty, Manan Singh Mahadev, John W Mallord, Nikita Prakash, Sachin P Ranade, Rohan N Shringarpure, Christopher GR Bowden, Rhys E Green

(2024) Recent trends in populations of Critically Endangered Gyps vultures in India. *Bird Conservation International*. 34: e1.

Gerry Swan, Vinasan Naidoo, Richard Cuthbert, Rhys E Green, Deborah J Pain, Devendra Swarup, Vibhu Prakash, Mark Taggart, Lizette Bekker, Devojit Das, JörgDiekmann, Maria Diekmann, Elmarié Killian, Andy Meharg, Ramesh Chandra Patra, Mohini Saini, Kerri Wolter (2006): Removing the threat of diclofenac to critically endangered Asian vultures. PLoS Biology 4(3): e66.

Amita Kanaujia, Sonika Kushwaha (2013) Vulnerable vultures of India: population, ecology and conservation. *Rare Animals of India*. pp. 113–144.

Mark A Taggart, Kalu R Senacha, Rhys E Green, Richard Cuthbert, Yadvendradev V Jhala, Andrew A Meharg, Rafael Mateo, Deborah J Pain (2009) Analysis of nine NSAIDs in ungulate tissues available to critically endangered vultures in India. *Environmental Science & Technology*. 43(12): 4561–4566.

DPRC Swarup, RC Patra, V Prakash, R Cuthbert, D Das, P Avari, DJ Pain, RE Green, AK Sharma, M Saini, D Das, M Taggart (2007) Safety of meloxicam to critically endangered Gyps vultures and other scavenging birds.

Abprez Thungwon Kimsing, Talo Biju, Jacob Ngukir, Daniel Mize. Vultures in India: A review. *International Journal of Biological Sciences*. 10: 70–78.

Thom Van Dooren. Australian Humanities: Vultures and their people in India—equity and entanglement in a time of extinctions. Review 50: 45–61.

STE's 7th Annual Meet and International Conference EWASH-2025

March 25-27, 2026
SRMIST, Chennai, Tamil Nadu

STE's 7th Annual Meet and the International Conference, EEWASH-25, held from March 25–27 at SRMIST, Chengalpattu District, Tamil Nadu.

The event was a remarkable gathering of experts, professionals, and enthusiasts, fostering insightful discussions and meaningful collaborations in the field.

In today's rapidly evolving global landscape, the sustainability of our natural resources—including water, land, and energy—is more critical than ever. Climate change, population growth, urbanization, and technological advancement are creating complex interdependencies between the environment, agriculture, energy systems, and public health. This three days multidisciplinary conference serves as a vibrant platform to explore how innovation, science, and technology—especially AI and digital tools—can address these interconnected challenges.






























We are organizing a health camp dedicated to providing essential medical services and healthcare support to underserved communities, with the objective of ensuring access to quality healthcare for those in need.

To successfully conduct this initiative, we humbly seek your generous support in the form of donations to help meet expenses related to medical supplies, logistics, healthcare facilities, and patient care services. Every contribution, regardless of its size, will play a significant role in enhancing the reach and impact of this humanitarian effort.

We would be sincerely grateful for your kindness, generosity, and support in making this noble initiative a meaningful success.

STE Team.

Invitation to Attend

National Conference on FRONTIERS IN ENVIRONMENTAL SUSTAINABILITY, CLIMATE STEWARDSHIP, AND BIOTECHNOLOGY (FESCBT-2026) HYBRID MODE

On behalf of the Organizing Committee, we are pleased to invite all to participate in a national conference at ICAR-CAFRI, Jhansi (UP), India.

Kindly submit the abstract and register by March 31, 2026 (the deadline) at the following link:

https://docs.google.com/forms/d/e/1FAIpQLSdbSLLwOTHBdUJYCcs2U0DUOcVq8rBNDLLZhQKWLNllrrNiLw/viewform?usp=header

The application for the Life Membership of STE can be submitted via online at the following link: ***https://www.stenvironment.org/national/lifetimemembershiponline***

The STE Society Award nomination can be made at the following link: ***https://www.stenvironment.org/awards/applyannualawards***

We look forward to your valuable participation.

The TEAM, FESCBT-2026

HEALING THE PLANET THROUGH FOREST DEVELOPMENT: GROW TREES, GROW LIFE

Tree plantation plays a vital role in improving the environment and maintaining a healthy climate on Earth. Trees absorb carbon dioxide, one of the major greenhouse gases responsible for global warming, and release oxygen that is essential for all living beings. They help in reducing air pollution, conserving water, preventing soil erosion, and maintaining ecological balance.

Forests and green spaces also provide shelter and food for wildlife, supporting biodiversity. In urban areas, trees reduce heat and create a cooler and healthier atmosphere. With increasing industrialization and deforestation, the Earth is facing severe climate challenges such as rising temperatures, unpredictable weather, and loss of natural habitats. Planting more trees is one of the simplest and most effective ways to combat climate change and restore environmental balance.

Every individual should participate in tree plantation drives and spread awareness about the importance of protecting nature for a greener, healthier, and more sustainable future.

Forests are vital as they act as the lungs of our nation, producing oxygen and absorbing harmful gases. Increasing tree planting efforts could lead to higher oxygen levels. Recently, regions like Odisha were severely affected by cyclones such as Fani, causing widespread devastation. Essential infrastructure, including water supply, phone lines, and electricity networks, suffered significant damage, and nearly a million trees were uprooted. This resulted not only in the loss of greenery but also in the destruction of cherished memories accumulated over many years by the residents.

In addition to their ability to reduce human damage, trees play a major ecological role in the battle against global warming. Some tree species have hurricane-resistant qualities in addition to their many other advantages, which would be extremely helpful for the country's eastern coast.

Exploring the Tenfold Importance of Planting Trees
Biodiversity thrives within trees, where hundreds of species including insects, fungi, mosses, animals, and plants coexist. These diverse creatures require different habitats depending on their specific needs for food and shelter. Without trees, woodland animals would lack essential living spaces, disrupting ecosystems that depend on them. Trees not only support a wide array of life but also provide critical ecological services such as carbon sequestration, soil stabilization, and water regulation, ensuring the health and balance of natural environments worldwide.

Best Practices for Effective Plantation

Plant Native Species First: Local trees are adapted to the regional climate, support native biodiversity (insects, birds, and fungi), and consume sustainable amounts of water.

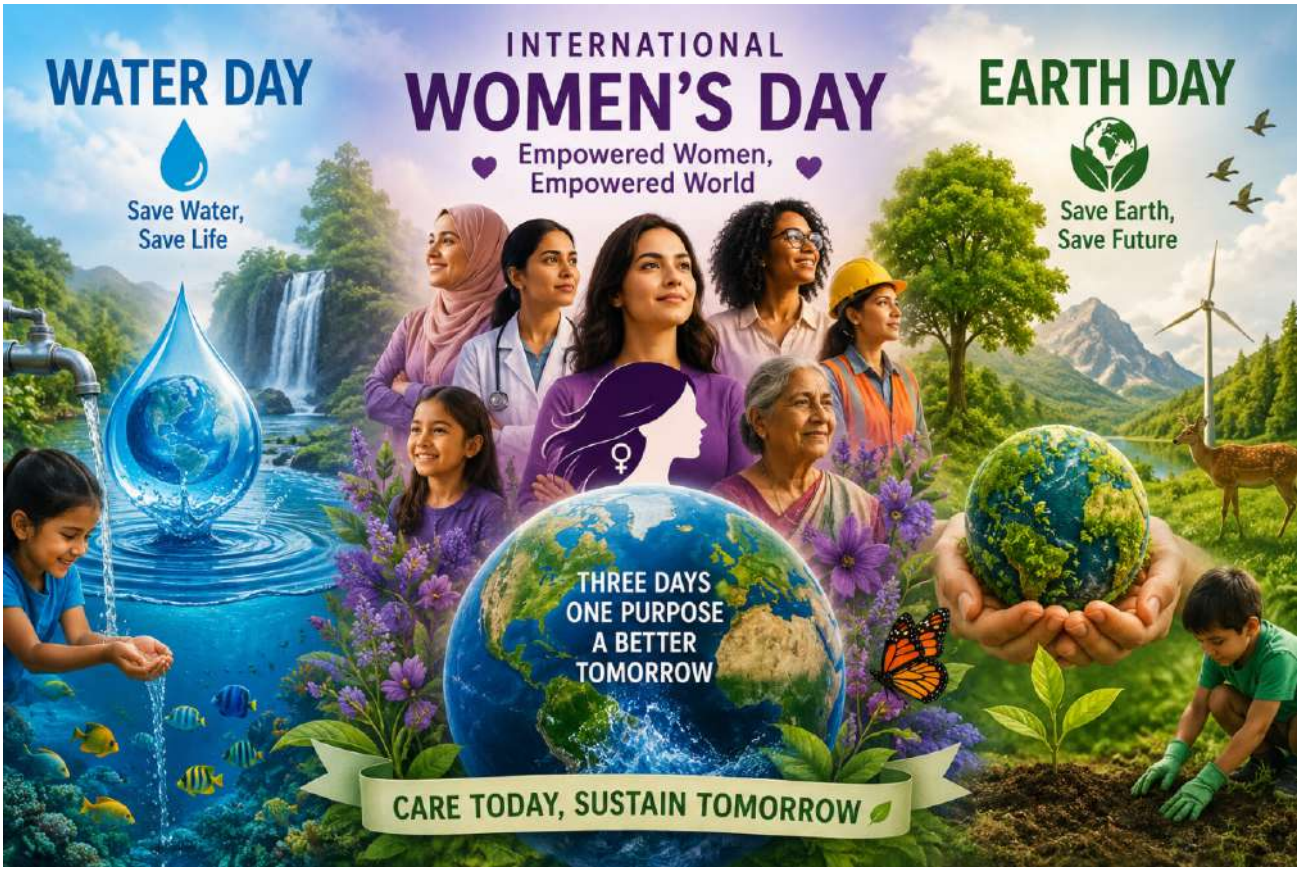
Prioritize Site Suitability: Avoid planting trees in naturally occurring, non-degraded ecosystems (like grasslands), as this can disrupt the native biome.

Ensure Long-Term Maintenance: A tree's survival rate depends heavily on sustained nurturing, especially during its first two to three years.

Avoid Monoculture: Diversify the plantation with a mix of timber, fruit, and shrub varieties to build a resilient ecosystem.

Trees are not only guardians of society, offering cleaner air and mitigating the impacts of climate change, but they also harbor biodiversity and provide crucial ecosystem services. As we witness the devastating effects of natural disasters like cyclones, the urgent need for tree conservation and restoration becomes apparent, highlighting their role in protecting communities and preserving cherished natural landscapes. By spreading awareness through education, community engagement, and advocacy, we can empower individuals and organizations to take meaningful action in planting and caring for trees, ensuring a greener and healthier planet for generations to come.

Source: ***Internet***


WATER DAY
Save Water,
Save Life
INTERNATIONAL
WOMEN'S DAY
Empowered Women,
Empowered World
EARTH DAY
Save Earth,
Save Future
THREE DAYS
ONE PURPOSE
A BETTER
TOMORROW
CARE TODAY, SUSTAIN TOMORROW


SAVE WATER, SAVE ENERGY
PLANTATION, CLEANLINESS & GOOD HYGIENE
Small Steps Today, Better Tomorrow
SAVE WATER
Every drop is precious.
Save water,
save life.
TURN OFF THE TAP WHEN NOT IN USE
TOGETHER
WE CAN MAKE
EARTH
A BETTER PLACE
SAVE ENERGY
Save energy today
for a brighter
tomorrow.
ON
OFF
SWITCH OFF WHEN NOT IN USE
PLANTATION
Plant more trees,
make Earth
greener.
PLANT A TREE, PLANT HOPE
SAVE EARTH
FOR A BETTER FUTURE
CLEANLINESS
A clean environment
leads to a healthy life.
KEEP YOUR SURROUNDINGS CLEAN
GOOD HYGIENE
Good hygiene
ensures good
health.
WASH HANDS
REGULARLY
BRUSH TWICE
A DAY
TAKE BATH
DAILY
SOAP
GOOD HABITS, HEALTHY LIFE
SAVE WATER
SAVE ENERGY
PLANT TREES
KEEP EARTH CLEAN
PRACTICE GOOD HYGIENE

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(NOMINATION AND APPLICATIONS ARE INVITED)

LAST DATE 10th March, 2025

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STE International Achiever Award
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STE Water Award
STE Women Excellence Award
STE Best Ideas/Innovations/Technology for Environment Award
STE Young Researcher (Faculty) Award
STE Young Researcher Award
STE Best School Principal Award
STE Best Teacher Award
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- DRDO Spin-off Technology Award- 2007
- NRDC, GOI –Social Innovation Award-2012

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- ♦ Milan Samity-Hrishikesh Park
- ♦ Swami Rama Himalayan University (SRHU), Dehradun, Uttarakhand

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जब न होगा पीने का नीर, तब सब करेंगे विचार गंभीर

STE is pleased to announce that the STE State chapter of Uttarakhand has been opened and is ready to start activities there. It is requested that those who want to do any programme/ seminar / conference / symposia or any other related activity under the mandate of STE are welcome to come forward and take off for the new journey of STE in the mountains.

SAVE THE ENVIRONMENT

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जब न होगा पीने का नीर,
तब सब करेंगे विचार गंभीर

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Save Life

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