CII-ITC Centre of Excellence for Sustainable Development

IBBI INDIA BUSINESS & BIODIVERSITY INITIATIVE

CII Confederation of Indian Industry

NATURE POSITIVE INDIA

BUSINESS LEADERSHIP IN ADVANCING THE GLOBAL BIODIVERSITY FRAMEWORK

Case Studies from India

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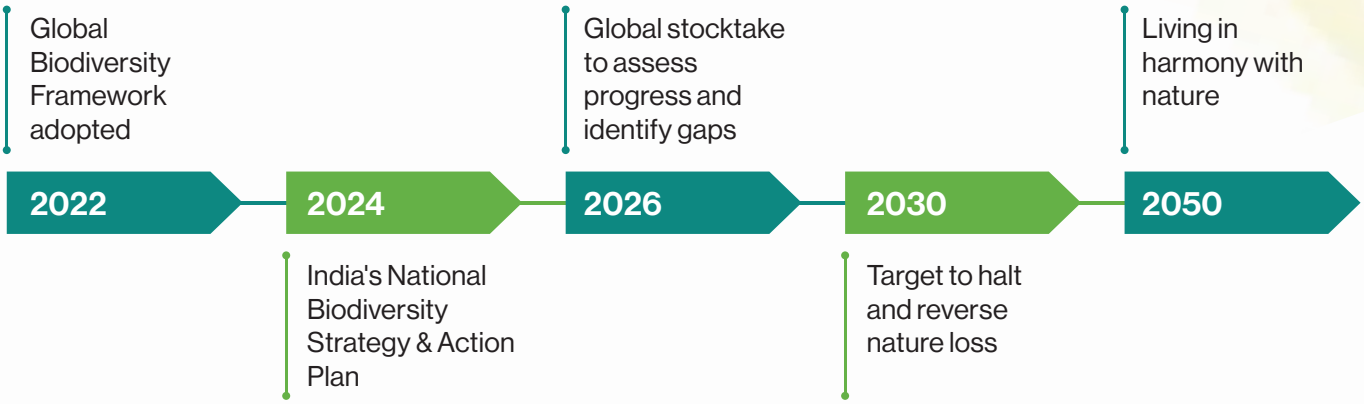
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Chapter-1

Turning Point for Global Biodiversity Agenda

The year 2022 marked a historic turning point for global biodiversity action. Recognizing the unprecedented decline in biodiversity and the growing risks posed by nature loss to economies, societies, and human well-being, countries came together to adopt an ambitious global roadmap to halt and reverse biodiversity loss by 2030 and achieve the vision of living in harmony with nature by 2050. This roadmap, embodied through 23 action-oriented targets, established a common framework for governments, businesses, financial institutions, indigenous peoples and local communities, civil society, and citizens to accelerate action on the ground while enabling the measurement of collective progress.

As the global community gathers in 2026, attention turns to assessing the progress made towards these targets. The stocktake provides an important opportunity to evaluate achievements, identify implementation gaps, assess the effectiveness of current interventions, and understand where additional efforts and financial resources are required. Equally, it helps highlight the critical role of different stakeholders, particularly the private sector, in driving transformative change. The findings of this review will inform the next phase of action, enabling countries and stakeholders to refine strategies, strengthen partnerships, and accelerate implementation during the remaining four years of the decade to achieve the goal of reversing nature loss by 2030.



This moment represents not only a review of progress but also a critical opportunity to mobilize greater ambition, innovation, and investment to secure a nature-positive future.

Translating Global Ambition into National Action: India's National Biodiversity Strategy and Action Plan, 2024

Following the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF) in 2022, India initiated a comprehensive and consultative process to develop its National Biodiversity Strategy and Action Plan (NBSAP), 2024. The strategy reflects India's commitment to a whole-of-government and whole-of-society approach, recognizing that biodiversity conservation and sustainable use cannot be achieved through government action alone.

To support implementation and accountability, India also submitted its Seventh National Report to the Convention on Biological Diversity (CBD), which provides a comprehensive assessment of progress across all 23 National Biodiversity Targets. The report tracks implementation through 142 national indicators and draws upon coordinated inputs from 33 central ministries and departments, state governments, statutory authorities, research institutions, businesses, and other stakeholders.

A defining feature of the NBSAP is the recognition of the private sector as a key partner in achieving national biodiversity goals. Reflecting the ambition of GBF Target 15, the strategy encourages businesses to better understand and manage their biodiversity-related dependencies, impacts, risks, and opportunities, while integrating biodiversity considerations into corporate decision-making, supply chains, investments, and disclosures.

By positioning businesses as active contributors to biodiversity outcomes, India's NBSAP signals a significant shift in the national biodiversity agenda. Biodiversity is no longer viewed solely as a conservation issue but as a shared responsibility and an important component of sustainable economic development. As India advances towards its vision of a developed and nature-positive economy, the engagement of businesses will be critical in mobilizing innovation, finance, technology, and partnerships needed to translate national commitments into measurable action on the ground.

This businesses integration is particularly significant for India as its home to nearly one-fifth of the world's population, India occupies only about 2.4% of the global land area, yet supports nearly 7-8 % of the world's recorded species, making it one of the 17 megadiverse countries.

Indicator	Status
Share of Global Land Area	2.4%
Share of Global Recorded Species	7-8%
Biodiversity Hotspots	4 (Himalaya, Indo-Burma, Western Ghats-SriLanka, Sundaland/Nicobar)
Megadiverse Country Status	One of 17 megadiverse countries
Recorded Animal Species	Over 91,000+
Recorded Plant Species	Over 45,000+
Notified Protected areas	1134 covers 1.88 lakh square kilometers
Ramsar Wetlands of International Importance	103 and 2 Ramsar Cities
Tiger Conservation	World's largest wild tiger population
Species Recovery Initiatives	Tiger, Asiatic Lion, Elephant, Great Indian Bustard, Gharial and others
Landmark Conservation Initiative	Reintroduction of Cheetah in India
Forest Cover	25.17 per cent of the country's geographical area

Ref: https://www.pib.gov.in/PressReleasePage.aspx?PRID=2269147&reg=48&lang=2

For India, where rich biodiversity underpins economic growth, livelihoods, and community well-being, the private sector is increasingly driving the transition towards a nature-positive future. By integrating biodiversity into business strategy, managing nature-related risks and dependencies, and investing in conservation, restoration, and nature-based solutions, companies are creating long-term value while contributing to national and global biodiversity ambitions.

The success of the NBSAP will depend not only on government action, but also on how effectively businesses emerge as active partners in reversing nature loss by 2030. This publication presents a compilation of actions and initiatives undertaken by members of the India Business & Biodiversity Initiative (IBBI), demonstrating how Indian businesses are contributing to the implementation of NBSAP. Through these examples, the publication highlights the growing role of businesses as custodians of natural capital and showcases how corporate leadership can help advance India's vision of a resilient, inclusive, and nature-positive future.

> *"The Global Biodiversity Framework & NBSAP has transformed businesses from observers of biodiversity challenges into essential partners in delivering a nature-positive future."*

Chapter-2

Business & Biodiversity in India

Every business depends on biodiversity and ecosystem services, either directly or indirectly. Nature provides the foundations of economic activity through clean water, fertile soils, pollination, climate regulation, raw materials, coastal protection, and healthy ecosystems that support resilient supply chains and communities. According to the World Economic Forum New Nature Economy Report, more than half of global GDP, representing approximately US$44 trillion in economic value, is moderately or highly dependent on nature and its services. At the same time, the latest WWF's Living Planet Report (LPR) 2026 reveals that 73% decline in the average size of monitored wildlife populations over a 52-year period. The report identifies habitat loss and degradation, overexploitation, climate change, pollution, invasive species, and disease as key drivers of biodiversity decline, underscoring the growing risks to businesses that rely on healthy ecosystems and stable natural resources.

Despite these alarming trends, there are clear signs that biodiversity loss can be reversed through sustained and coordinated action. The WWF Living Planet Report also highlights encouraging recovery stories for species such as Tigers, Elephants, Marine turtles, and Bluefin tuna, demonstrating that targeted conservation investments, science-based management, and multi-stakeholder collaboration can deliver measurable outcomes for nature.

Building on this evidence, the recently adopted IPBES Business and Biodiversity Assessment concludes that every business both depends on and impacts biodiversity, and that biodiversity loss now represents a critical systemic risk to economies, financial stability, and human well-being.

IPBES Message to Business: Businesses can either lead transformative change for nature or contribute to accelerating biodiversity loss. Assessing, managing, and acting on biodiversity dependencies and impacts is no longer a sustainability choice but a strategic business necessity.

Business Takeaways from the IPBES Business and Biodiversity Assessment

Every business depends on nature and impacts nature

Biodiversity loss is a systemic business risk affecting supply chains, operations, financial performance, and long-term resilience.

Businesses are critical to achieving global biodiversity goals and must play an active role in halting and reversing nature loss.

Biodiversity must be integrated into core business decisions, including governance, strategy, risk management, procurement, and investments.

Nature-positive actions create business value through improved resilience, innovation, access to finance, and long-term competitiveness.

India Business & Biodiversity Initiative (IBBI): Catalysing Business Action for Nature

IBBI
INDIA BUSINESS & BIODIVERSITY INITIATIVE

Established in 2014 by the Confederation of Indian Industry (CII) in partnership with the Ministry of Environment, Forest and Climate Change (MoEFCC), the India Business & Biodiversity Initiative (IBBI) has been at the forefront of integrating biodiversity into corporate decision-making in India. Guided by its vision that "Indian businesses value, conserve, restore and wisely use biodiversity, maintaining ecosystem services, sustaining a healthy planet, and delivering benefits essential for all people," IBBI has worked to build awareness, capacity, and leadership among businesses on the importance of biodiversity and ecosystem services.

Following the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF) and the development of India's National Biodiversity Strategy and Action Plan (NBSAP), 2024, IBBI strengthened its focus from awareness creation to enabling measurable business action. The initiative encourages companies to assess their biodiversity impacts, dependencies, risks, and opportunities; develop science-based and measurable biodiversity targets; integrate nature into business strategy and decision-making; and undertake collaborative conservation and restoration actions across landscapes and value chains.

To align business action with national and global biodiversity priorities, IBBI has incorporated the objectives of the 23 targets of the GBF and NBSAP into its Eight-Point Business & Biodiversity Declaration. Signed by CEOs and business leaders, the declaration serves as a voluntary commitment to integrate biodiversity considerations into business operations, governance, investments, and stakeholder engagement. Through this commitment, IBBI member companies are demonstrating leadership in advancing nature-positive business practices and contributing towards the shared vision of operating in harmony with nature while creating long-term value for business, society, and the economy.

NBSAP & GBF in IBBI action Agenda

Vision

Indian businesses value, conserve, and restore biodiversity along with wise use of biological resources, maintaining ecosystem services, sustaining a healthy planet, and delivering benefits essential for all people.

Mission

- Encourage businesses to measure, monitor and reduce biodiversity related risks, dependencies and impacts along their value chains and promote actions to ensure sustainable patterns of production.

- Facilitate collaboration among businesses, governments, and stakeholders to promote an ecosystem-based approach for biodiversity conservation.
- Support Government of India in meeting global and national commitments on biodiversity conservation.
- Showcase business champions and best practices on biodiversity conservation.
- Develop enabling policy and financing mechanism for implementation of ecosystem-based approaches and biodiversity conservation by businesses.

CEO led IBBI Declaration



Assess, measure, and monitor biodiversity-related risks and opportunities across the business value chain, product, and service lines



Set measurable targets to manage and reduce biodiversity-related risks within own operations and across the supply chain



Develop an integrated action plan for biodiversity risk management and nominate a Biodiversity Champion



Adopt ecosystem-based approaches to address the biodiversity-related risk



Create awareness on biodiversity conservation among employees, value chain partners, and stakeholders



Adapt mechanisms for Access and Benefit Sharing (ABS) of biological resources with stakeholders



Voluntary disclosures on actions taken for biodiversity-related risks and opportunities management



Document case studies on biodiversity-risk management and biodiversity conservation

Indian businesses leadership in implementing NBSAP & GBF

The adoption of the Kunming-Montreal Global Biodiversity Framework (GBF) and India's National Biodiversity Strategy and Action Plan (NBSAP) 2024-2030 has accelerated business action on biodiversity across sectors. Indian businesses are increasingly moving beyond compliance and reporting towards measurable action on nature conservation, ecosystem restoration, sustainable value chains, species conservation, and biodiversity financing. Through the IBBI, companies are demonstrating how the private sector can contribute to multiple GBF and NBSAP targets while strengthening business resilience and sustainability.

To understand how corporate biodiversity commitments contribute to GBF and NBSAP implementation, publicly available information from 100 IBBI member companies was reviewed across different areas of business action on nature.



Business Action Beyond Disclosure

Recognised under India's NBSAP as a key implementation platform for business engagement, IBBI has been mobilising corporate action through its CEO-led IBBI Declaration, which aligns business commitments with the 23 targets of the GBF and NBSAP.

IBBI Network (2026)

- 160 Business Members
- 100 IBBI Declaration Signatories
- 60 IBBI Network Members
- 30 TNFD Adopters
- 20 Stakeholder Organisations comprising NGOs, research institutions, and knowledge partners

Indian businesses have made significant progress in integrating biodiversity into corporate governance and decision-making:

- 40 companies, covering more than 700 operational locations, have assessed nature-related risks and opportunities using the TNFD LEAP framework.
- 30 companies have publicly disclosed nature-related risks and opportunities through dedicated reports, annual reports, and BRSR disclosures.

70 companies have adopted measurable biodiversity commitments, including:

- Net Positive Impact (NPI) on Biodiversity
- No Net Loss (NNL) of Biodiversity
- Net Positive Gain for Biodiversity
- Deforestation-Free Supply Chains
- Living in Harmony with Nature
- Biodiversity Risk Management across Value Chains







Advancing Access and Benefit Sharing, Biotechnology and Biodiversity Finance

Indian businesses are increasingly supporting the objectives of the Biological Diversity Act and Access and Benefit Sharing (ABS) mechanisms through responsible sourcing and benefit-sharing practices.

Key contributions include:

- Training and awareness programmes on Biological Diversity Act compliance to over 100 MSMEs and businesses.
- Integration of ABS commitments within the IBBI Declaration.
- Support for sustainable value chains that recognize the role of traditional knowledge and biological resources.

India's biodiversity governance framework is also demonstrating tangible results through ABS implementation, with the National Biodiversity Authority (NBA) realizing over ₹266 crore from users of biological resources, while more than ₹200 crore has been disbursed towards conservation and benefit-sharing initiatives. These efforts highlight the growing importance of biodiversity finance and equitable sharing of benefits arising from biological resources.



Conserving Threatened Species and Strengthening Biodiversity Stewardship

Indian businesses are increasingly investing in flagship species conservation through partnerships, direct investments, employee engagement, and awareness campaigns.

IBBI members support conservation efforts for a range of species including:

- Asian Elephant (Elephas maximus)
- Great Indian Bustard (Ardeotis nigriceps)
- Leopard (Panthera pardus)
- Gharial (Gavialis gangeticus)
- Indian Monitor Lizard (Varanus bengalensis)
- Asian Water Monitor Lizard (Varanus salvator)
- Sloth Bear (Melursus ursinus)
- Whale Shark (Rhincodon typus)
- Olive Ridley Turtle (Lepidochelys olivacea)



Area-Based Conservation and Wetland Restoration

Recognizing the importance of wetlands and critical ecosystems, CII and the Ministry of Environment, Forest and Climate Change established the India Wetland Coalition to create multi-stakeholder partnerships for the conservation and restoration of wetlands.

Business-led actions include:

- Partnerships in the conservation of three Ramsar Sites:
  - Ashtamudi Wetland
  - Vembanad Wetland
  - Bhindawas Wildlife Sanctuary
- Restoration and management support for more than 200 wetlands across operational landscapes and value chains.
- Mangrove conservation initiatives in Maharashtra, Andhra Pradesh, Gujarat, and Tamil Nadu.

Business leadership is also emerging in Other Effective Area-based Conservation Measures (OECMs). Three industrial landscapes have been identified or earmarked as OECMs:

- Godrej Campus, Maharashtra
- Coromandel Bird Paradise, Andhra Pradesh
- TVS Motor Company, Hosur Facility



Building Knowledge and Capacity for Biodiversity Action

Building awareness, capacity, and technical expertise is essential for scaling biodiversity action across sectors. Through partnerships with TNFD and knowledge institutions, IBBI has invested significantly in developing India's biodiversity capability ecosystem.

- More than 800 professionals trained across 40 companies in nature-related risk assessment and management.
- Participation from sectors including renewable energy, mining, tourism, cement, agriculture, and agrochemicals.
- Development of a national pool of 75 trained professionals and trainers to support businesses in applying the TNFD framework and conducting nature-related risk and opportunity assessments.

> *"The integration of biodiversity into business decision-making is increasingly shaping how companies manage risks, allocate capital, engage value chains, and contribute to conservation outcomes. Through investments in ecosystem restoration, species conservation, knowledge development, and nature-positive practices, businesses are emerging as important partners in the implementation of India's NBSAP and the GBF, supporting both biodiversity goals and long-term business resilience."*

Chapter-3
Case Studies from India

This chapter presents case studies from Indian businesses whose actions have been mapped against relevant GBF and NBSAP targets to illustrate private-sector contributions towards biodiversity outcomes. The case studies showcase a range of approaches, including nature-related risk and opportunity assessments, adoption of nature-based solutions, ecosystem and habitat restoration, species conservation initiatives, sustainable value-chain management, and partnerships with local communities and conservation organizations. Together, these examples highlight businesses actions on integrating nature into their operations and investments while contributing to national biodiversity priorities and the global goal of halting and reversing nature loss by 2030.

Biodiversity-led Water Stewardship across Renewable-energy Landscapes

2030
no net loss of biodiversity commitment

100%
sites covered by biodiversity impact assessments

2.14×
water conserved vs. operational consumption (FY26)

1,51,000+
community beneficiaries from pond rejuvenation

Renewable energy assets operate within landscapes shaped by habitats, vegetation, soils, drainage, aquifers and community resource needs. As India races towards its 500 GW renewable-energy ambition, the sector's relationship with nature demands structured and measurable stewardship.

Adani Green Energy Limited (AGEL) is one of the India's largest renewable energy companies, with an operating portfolio of over 20 GW spanning 12 states, committed to accelerating the nation's transition towards a low-carbon future. Through the development and operation of large-scale solar, wind and hybrid renewable energy projects, AGEL is contributing to India's clean energy ambitions, supporting decarbonization and enabling sustainable economic growth. AGEL places biodiversity assessment and risk management at the beginning of project planning, with site-level action intended to avoid and reduce impacts and support habitat and species conservation. By integrating the Taskforce on Nature-related Financial Disclosures (TNFD) framework from FY 2024 onward, AGEL has moved beyond regulatory compliance towards a nature-positive model of renewable energy growth.

This case study documents the implementation and measurable outcomes of AGEL's biodiversity-led water stewardship initiative across operational portfolio. It demonstrates how ecological planning, community water security and operational resource efficiency can advance together — and how this integrated approach aligns with the Kunming-Montreal Global Biodiversity Framework (GBF) and India's National Biodiversity Strategy and Action Plan (NBSAP).



Juni Khari



Sabdasar Pond, Degrai, Rasala

Biodiversity management framework and approach

AGEL's biodiversity management is structured around a six-stage framework applied across all operational and project sites:

Assess
Biodiversity & critical-habitat assessments at all sites

Avoid
Preferential use of barren, uncultivated land

Mitigate
Site-specific controls for wind and solar landscapes

Restore
Habitat restoration and native-tree planting

Manage
Biodiversity Management Plans integrated into enterprise risk

Build Capacity
Employee training in ecosystem-service management

AGEL's approach includes: independent third-party Environment and Social Impact Assessments (ESIA) aligned with the Equator Principles and IFC Environmental & Social Performance Standards; integration of biodiversity risks into the Enterprise Risk Management (ERM) framework; site-specific Biodiversity Management Plans; and half-yearly internal and annual external environmental audits under the ISO 14001:2015 certified Environmental Management System. AGEL has been a signatory to the India Business and Biodiversity Initiative (IBBI) since 2020, committing to No Net Loss of Biodiversity by 2030.

Linkages with GBF and India's NBSAP

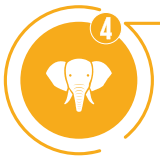
AGEL's biodiversity-led water stewardship initiative makes direct and demonstrable contributions to eight targets of the Kunming-Montreal Global Biodiversity Framework (GBF) and India's National Biodiversity Strategy and Action Plan (NBSAP).



Biodiversity-inclusive Planning
Catchment, vegetation, terrain and stakeholder needs inform all site selection



Ecosystem Restoration
Pond and habitat restoration support recovery of degraded arid and semi-arid landscapes



Species Recovery
Great Indian Bustard habitat collaboration supports critically endangered species conservation



Pollution Reduction
Desilting, sediment control and inlet maintenance reduce pressure on freshwater bodies



Climate Resilience
Water efficiency, rainwater capture and recharge address rainfall variability and drought risk



Ecosystem Services
Ponds support water regulation, groundwater recharge and community water security



Business Action on Nature
Impact assessments, risk integration, BMPs and No Net Loss commitments embed corporate accountability.



Knowledge and Capacity
Employee training in ecosystem-service management advances biodiversity awareness

Biodiversity and water stewardship initiative at scale

AGEL connects biodiversity planning directly to water stewardship, using catchment assessment, pond development and water-efficient technologies to address shared ecological and community needs. In FY 2025–26, independent assurance covered 105 solar, wind and hybrid operational plants and 126 water-conservation locations across 12 states - a boundary that included freshwater intake, rainwater harvesting, groundwater recharge, percolation ponds and recharge pits.

Pond rejuvenation initiative

The pond-rejuvenation initiative deepens and desilts traditional water bodies to improve storage capacity, groundwater recharge and freshwater habitat improvement, which is community-oriented: by FY 2025–26 more than 1,51,000 people, including water-scarce communities — benefit from enhanced water availability.

Pond site selection follows an eight-stage pre-construction assessment covering topography, catchment delineation, infiltration rates, geological and aquifer conditions, rainfall data, sediment load estimation, groundwater monitoring well development, and structure dimensioning, with the maximum potential for enhancing water security while conserving and ehnancing aquatic biodiversity.

Post-construction management includes annual pre-monsoon desilting, bund stabilization, inlet-drain reopening and regular monitoring of groundwater levels— ensuring sustained function across monsoon cycles.

Adani Green's pond rejuvenation initiative also leverages advanced technologies on pilot basis, such as MODFLOW-6 groundwater modelling, geospatial mapping, and scientific validation to measure environmental outcomes beyond physical restoration. The pilot project creates a foundation for incorporating water and biodiversity monitoring tools, including drone-based surveys, AI-enabled species tracking, and remote sensing applications.

Robotic module cleaning and water efficiency

On the water consumption side, AGEL deployed robotic module cleaning systems across 11,705 MW of solar capacity — representing 71.5% of its operating portfolio in FY 2025–26 — saving approximately 791 million liters of water that would otherwise be required for manual panel washing.

This dual approach — eliminating the water requirement through robotic module cleaning combined with landscape-level recharge through pond development and rainwater harvesting is central to AGEL's water-positive model. Net water conservation is not offset against use; it is additive.

Great Indian bustard conservation

Through its collaboration with the Ex-situ Conservation Authority, Government of Rajasthan, AGEL is advancing habitat development efforts for the critically endangered Great Indian Bustard (GIB) in Rajasthan. This program exemplifies AGEL's commitment to habitat enhancement and biodiversity management and contributes meaningfully to GBF Target 4 focused on the recovery and conservation of threatened species.

Tree plantation and habitat enhancement

AGEL has committed to grow 27.86 million trees by 2030, as part of Adani Chairman's 100-million-tree plantation pledge by 2030 at the World Economic Forum. Plantations are concentrated on barren / un-cultivated land within and surrounding project sites, maximizing ecological additionality.

Under the Adani Van Mass Plantation Initiative, AGEL has transformed open lands from Panchayats and Government Schools into biodiverse green assets. Cumulatively, 25,220 trees have been planted across 7 Adani Van locations on 11.5 acres of land, contributing to ecosystem enhancement, climate resilience, and community well-being. The plantation is designed to enhance green cover and provide shelter, roosting space and natural food sources for local bird species. The initiative has also included the installation of approximately 100 artificial bird nests, contributing to local avian biodiversity and encouraging ecological awareness among students and community members.

Preventive biodiversity mitigation measures at wind and solar projects

AGEL applies preventive mitigation measures as listed below across wind, solar projects and wind-solar hybrid projects to avoid and minimize the impacts on biodiversity, particularly to birds, while limiting broader ecosystem stress.

Bird Hit Protection Measures for T-Lines:

- Insulation sleeves are fitted on the transmission lines close to the pole to avoid any electrocution impact and associated risks
- Bird flight diverters (BFDs) are installed on transmission lines to improve visibility and avoid bird collision impact in Rajasthan and Gujarat

- Bird guards are installed at the electric poles to avoid unsafe perching and nesting which may lead electrocution related risk

Bird Hit protection measures for Wind Turbine

- Installing 5.2 MW and 3.3 MW WTGs, which require less land footprint
- Red safety markings are painted on tip of wind-turbine blades to improve visibility and prevent bird and bat collisions

Bird Hit protection measures for Solar Projects

- Barren and low-ecological-value land is prioritised to minimise habitat disturbance
- Installed Solar modules with anti-reflective coating to avoid the lake effect

Biodiversity outcomes

100% of AGEL's operational sites are covered by Biodiversity Impact Assessments, this comprehensive coverage — achieved across solar, wind and hybrid projects in 12 states — provides the data foundation for site-level Biodiversity Management Plans and ERM integration.

Approximately 3,45,000+ trees had been planted till FY26, which is having carbon sequestration potential of ~7,260 tCO_2 per year.

AGEL achieved and sustained net water-positive status for 100% of its operational portfolio, audited and certified by Intertek India Pvt. Ltd. The water balance demonstrates that conservation exceeds consumption by a factor of 2.14×.

AGEL is committed to protecting and enhancing biodiversity across its renewable energy portfolio through science-based assessments, habitat conservation, ecosystem enhancement, and tree plantation initiatives. By integrating biodiversity considerations into project development and operations, AGEL seeks to create positive outcomes for nature while advancing its No Net Loss commitment. The key outcomes are summarised below

Theme	Indicator / Metric	Key outcomes (FY 2025–26)
Water Conservation	Potential rainwater harvested & recharge created	• 10,32,281 m^3 water conserved across 126 conservation sites • Water positive by 2.14 times
Water Saving	Water use eliminated by robotic module cleaning	• ~791 million litres of water use eliminated • 55% reduction in operational water intensity (kL/MWh) w.r.t. FY 2022-23
Biodiversity	Sites with Biodiversity Impact Assessments	• 100% of operational sites
Biodiversity	Trees planted till FY26	• ~3,45,000+ trees; ~7,260 tCO_2/yr sequestration
Biodiversity	No Net Loss commitment	• On track; IBBI signatory since 2020

Conclusion

Adani Green Energy Limited (AGEL) demonstrates that renewable energy expansion can be effectively aligned with biodiversity conservation, water stewardship, and community development through a science-based and integrated approach. By embedding biodiversity considerations into project planning, operational management, and water-resource interventions, AGEL has delivered measurable outcomes, including water-positive operations, large-scale pond rejuvenation, habitat enhancement, species conservation initiatives, and tree plantation efforts.

The case study highlights how nature-positive renewable energy development can contribute simultaneously to climate action, ecosystem enhancement, and local water security while supporting the goals of the Kunming-Montreal Global Biodiversity Framework and India's National Biodiversity Strategy and Action Plan. Through continued implementation of its No Net Loss commitment, innovative technologies, and collaborative conservation initiatives, AGEL is creating a scalable model for integrating biodiversity and water stewardship into the renewable energy sector, generating long-term value for nature, communities, and sustainable business growth.

Saving Gharial "The River Tiger"

Securing rivers, protecting biodiversity, freshwater ecosystems and communities

RAJASTHAN | MADHYA PRADESH | UTTAR PRADESH

6 years
of work in the chambal landscape

~14 km
priority river stretches under river watch

~130
gharial nests protected

~3,000
hatchlings protected until monsoon

Gavialis gangeticus or the Gharial (a unique fish-eating crocodilian) dwells in large rivers of South Asia and is Critically Endangered. The Chambal River its last stronghold and accounts for about 80% of the global population. Gharials depend on connected, seasonally dynamic rivers with deep pools, abundant fish and exposed sandbanks for basking and nesting.

The species is therefore more than a conservation subject in isolation. Protecting habitat for feeding, breeding, nesting and movement in gharials also supports Gangetic dolphins, turtles, birds, fish and other freshwater biodiversity. The same river conditions sustain water availability, food production and community well-being. The conservation proposition is straightforward: saving gharials can help safeguard the river systems on which nature and people depend.

Restoration Focus

National Chambal Sanctuary

Restoration Objective

THE "RIVER TIGER" - A FRESHWATER FLAGSHIP

The Gharial provides a focal point for protecting free-flowing river stretches, fish-rich pools, nesting sandbanks and connections between habitats across a multi-state river landscape.



Chambal Landscape



Gharial basking Along Chambal River

The conservation challenge

Even in remaining gharial habitats, unauthorized sand mining and fishing bycatch can disturb nesting areas and negatively affect survival. Water extraction can reduce flow and disrupt movement of this highly mobile species. Knowledge gaps concerning population change, movement, survival, genetics and habitat use can also limit effective conservation decisions.

River conservation requires continuity. Astral Ltd and Gharial Ecology Project (GEP) therefore work with a simple idea: saving Gharials can help safeguard our rivers, on which biodiversity and communities depend. The Gharial Ecology Project has worked in the Chambal landscape for 19 years, following the major mortality event of 2007–08. Around 80% of the field team comes from riverine communities, bringing long-term local knowledge into scientific monitoring and habitat protection. The programme also contributes scientific inputs to wider crocodilian conservation networks, including assessments undertaken through the International Union for Conservation of Nature Species Survival Commission Crocodile Specialist Group (IUCN SSC CSG).

Habitat Pressure
Sand mining leads to loss of nesting habitat

Direct Risk
Netting bycatch threatens survival

Flow Change
Water extraction affecting movement and habitat

Knowledge Gaps
Insufficient evidence for adaptive decisions

From evidence to conservation action

Astral Ltd and the Gharial Ecology Project used a connected pathway in which ecological evidence identifies conservation priorities, communities help protect critical river habitat, and Forest Departments translate findings into field management. The approach links research, local stewardship and government-led action rather than treating them as separate components.

Building the evidence base

Long-term field surveys track gharial numbers, nests, breeding locations and changes in population size. Telemetry is used to understand movement, behaviour and survival of wild and captive-reared gharials. Population-genomic studies provide information on genetic status and historical population patterns, while river-habitat mapping connects species records with ecological conditions. Together, these methods are intended to clarify species requirements and identify habitats requiring management attention.

River Watch: community stewardship for nesting habitat

Through the River Watch approach, people living along the river contribute local knowledge and support protection of critical habitat during nesting and hatching. In an approximately 14-kilometre priority stretch, community-supported efforts protected around 130 gharial nests and approximately 3,000 newly hatched young until the arrival of the monsoon. The model combines field presence, local stewardship and conservation-linked participation.

14 km Priority Stretch
Focused river-watch presence

130 Nests
Protected during a critical breeding period

~3,000 Hatchlings
Protected until monsoon arrival

Translating science into management practice

The programme works with the State Forest Departments of Rajasthan, Madhya Pradesh and Uttar Pradesh to strengthen field-based conservation capacity. The Fast-Track Head Start Program with the Rajasthan Forest Department adapts conventional head-starting to improve the survival prospects of smaller gharials in the upstream Chambal and links release with subsequent fine-scale monitoring.

In the Son Gharial Sanctuary within Sanjay Tiger Reserve, collaboration with the Madhya Pradesh Forest Department focused on restoring wild reproduction through scientifically informed translocation of adult males from the Chambal. Experienced community-based field teams safely completed three translocations. Each animal was approximately five metres long and weighed around 600 kilograms. The submitted case material reports successful breeding in three different years following these actions.

Fast-track Head Start
Supports smaller gharials in the upstream Chambal through adapted head-starting and monitoring

Son River Recovery
Uses scientifically informed adult-male translocations to support reproduction in the Son Gharial Sanctuary

Long-term partnership as a conservation enabler

Astral Ltd began supporting the Gharial Ecology Project in 2021. What started as support for fieldwork has developed into long-term backing for the core conservation programme. Continuity helps retain experienced teams, sustain engagement with communities and government partners, and maintain the long-term datasets needed for adaptive management of a long-lived species.

Implementation is coordinated through the Madras Crocodile Bank Trust and the Gharial Local & Global Foundation, working with the State Forest Departments of Rajasthan, Madhya Pradesh and Uttar Pradesh, the Ministry of Environment, Forest and Climate Change, riverside communities, local field participants and scientific collaborators. Astral Limited also participates in the International Union for Conservation of Nature Species Survival Commission Crocodile Specialist Group, connecting corporate support with the wider conservation community.

Progress and emerging value

The programme tracks conservation action through gharial and nest records, habitat and movement information, stakeholder knowledge, field-management interventions, scientific publications and public communication. Its principal value lies in the connected system it has built: long-term science informs priorities, communities strengthen habitat protection, Forest Departments apply evidence in management, and corporate support provides continuity.

- Long-term ecological monitoring of population size, nesting and habitat use in the Chambal landscape.
- Telemetry and genomic research supporting understanding of movement, survival and population history.
- Community-supported protection of nests and hatchlings across a priority river stretch.
- Adapted head-starting in the upstream Chambal with the Rajasthan Forest Department.
- Three adult-male translocations to the Son Gharial Sanctuary, followed by breeding reported in three different years.
- Participation of riverine-community members within the field team and River Watch network.
- Scientific learning shared through conservation networks, assessments, conferences, publications and popular communication.

The business case for investing in a threatened species

Freshwater Security
Healthy river habitats underpin water availability and food systems

Biodiversity Value
Gharial habitat also supports dolphins, turtles, fish and birds

Decision-useful Evidence
Long-term monitoring enables adaptive conservation action

Partnership Continuity
Sustained finance retains skills, trust and institutional memory

Linkages with GBF and India's NBSAP

4 Species Recovery
Ecological and genomic research, nest protection and field recovery action

11 Nature's Contributions
Healthy rivers support freshwater, food production and ecosystem services

14 Mainstreaming
Evidence is translated into government-led planning and management

15 Business Action
Sustained corporate support enables measurable biodiversity action

19 Biodiversity Finance
Long-term private finance supports continuity of conservation work

20 Capacity & Cooperation
Monitoring, telemetry, genetics and manager capacity building

21 Knowledge
Long-term field evidence is generated and shared for decisions

22 Participation
Local field teams and River Watchers contribute knowledge and action

> ***At Astral, we believe, we have an important role in protecting the natural systems on which society depends. Our partnership with the Gharial Ecology Project began with a simple conservation need and has grown into a long-term commitment to the Gharial, the Tiger of the Rivers. By supporting scientific based conservation actions, community participation and stronger field capacity, we are helping protect a Critically Endangered species and the river habitats it represents. Our long-term commitment reflects our belief that conservation needs continuity, collaboration and measurable action. We are proud to support a partnership that connects business responsibility with healthier rivers, biodiversity and resilient freshwater ecosystems***
>
> *Kairav Engineer, Executive Director, Astral Limited*

Saving Gharials means safeguarding rivers

Long-term business support connects science, local stewardship and government action to protect a threatened species, strengthen freshwater biodiversity and sustain the river systems on which communities depend.



Tagging Gharial



Tracking Ghraial

Two-Way Coexistence

Reducing livestock depredation and conserving leopard cubs in Navsari's agroecosystems

NAVSARI DISTRICT, GUJARAT

368 villages assessed

38 highly vulnerable villages

3,614 reported depredation cases

57 cubs assisted

31 cubs reunited with mothers

Navsari's sugarcane-rich agroecosystems provide dense seasonal cover that leopards use within a landscape where natural habitat is limited or fragmented. The same land supports farmers and livestock. This creates two connected risks: livestock depredation can impose economic losses and weaken tolerance, while cubs born in sugarcane fields may be exposed during pre-harvest cutting and crop-residue removal.

The initiative treats livelihood protection and leopard conservation as parts of the same land-use challenge. Field-verified conflict records identify where livestock losses are concentrated; breeding-habitat information indicates where cubs may be at risk; farmer communication supports early reporting; and the project team assists the Gujarat Forest Department during authorised rescue, relocation and reunion activities

Restoration Objective

Enhance human–leopard coexistence in Navsari by reducing risks to people and livestock and supporting early detection, authorised response and safe reunion of leopard cubs encountered during sugarcane harvesting.



A leopard in agri landscpae



Mother leopard relocating its cub

Understanding the nature-related risk

The project analysed field-verified records of livestock depredation and human incidents for 2021–2025 across Navsari district. Of 368 villages assessed, 38 were classified as highly vulnerable to livestock depredation. A total of 3,614 depredation cases documented, of which 2,216 occurred in highly vulnerable villages, representing 61.32% of the reported total.

Cows and calves accounted for 1,782 cases (49.31%), goats for 1,697 cases (46.96%), buffaloes for 115 incidents (3.18%) and horses for 20 incidents (0.55%). The study also records two human fatalities and 13 non-fatal human attacks during the assessment period. These findings provide a basis for directing awareness and field action towards locations with higher reported exposure.

Livelihood Risk
Livestock losses affecting farm households

Safety Risk
Reported human incidents requiring prevention and response

Cub Vulnerability
Breeding sites exposed during crop harvesting

Land-use Pressure
Agriculture and leopard habitat overlap in the same fieldst

From spatial evidence to field response

The intervention follows a connected pathway. Evidence is first used to locate concentrated risk; farmers in priority villages receive practical information; early cub reports are channelled to the competent authority; and authorised field response is supported by the project team. Recognition of participating farmers helps reinforce local stewardship.

Verify
Field-check conflict records

Map
Classify vulnerable villages and breeding risk

Inform
Share depredation-reduction practices

Report
Encourage cub alerts before harvest

Respond
Assist authorised rescue and reunion

Recognise
Appreciate participating farmers

Mapping livestock depredation and breeding risk

The project quantified the pattern of livestock depredation and reported human incidents across Navsari using field-verified records. Spatial classification identified villages with higher reported depredation and developed a breeding-habitat risk map. The resulting evidence allows conservation activity to be prioritised at village and landscape scales rather than relying on general awareness alone.

Turning evidence into farmer-centered prevention

Awareness activities in identified sensitive villages focus on practical measures intended to reduce livestock losses. A WhatsApp group currently connects 108 farmers and provides a channel for sharing information on leopard activity. The participating farmers reached through awareness activities have adopted recommended depredation-reduction practices.

108 Connected Farmers
WhatsApp-based information sharing

38 Priority Villages
Higher vulnerability identified from submitted records

19 Farmers Recognised
Supported cub reunion with the Forest Department

Protecting cubs before sugarcane harvesting

The cub-reporting appreciation-certificate scheme recognises farmers who report leopard cubs before sugarcane harvesting. Early reporting creates an opportunity for the Gujarat Forest Department and the project team to assess the site and undertake appropriate action. During 2023–2025, early reporting assisted the Gujarat Forest Department with 57 cubs and successfully reuniting 31 with their mothers.

The intervention links crop timing with wildlife response. Instead of treating cub discoveries as isolated rescue events, the project uses breeding-habitat information, farmer alerts and coordinated field action to reduce risk during a predictable agricultural operation.

Implementation status

Completed
Analysis of 2021–2025 depredation and human-incident records, identification of sensitive villages and breeding-habitat risk mapping

Underway
Farmer awareness activity across identified depredation-sensitive villages

Scaling
Cub-reporting appreciation-certificate scheme in additional villages within the highest-risk categories

Partnership connecting research and practice

Since 2023, Astral Ltd has supported the Leopard Ecology Project, with permission from the Gujarat Forest Department. The collaboration supports ecological research, field verification, spatial analysis, farmer engagement and conversion of findings into practical conservation measures. Implementation involves the Social Forestry and Territorial Forest Divisions of South Gujarat, local communities, farmers, livestock owners, field participants and scientific partners.

The partnership bridges academic research and field conservation by enabling evidence to guide decisions at farm, village and landscape scales. Continuing support is intended to strengthen long-term monitoring, community participation and farmer-centered coexistence measures across South Gujarat.

Replicability: conditions for applying the model elsewhere

The Navsari case moves beyond awareness and treats coexistence as an operating system based on evidence, prevention, communication and authorised response. The model recognises that coexistence is not the absence of risk; it is the capacity to identify, reduce and respond to impacts affecting both people and wildlife.

The approach may be adapted to other leopard-agroecosystem landscapes where dense crops provide seasonal cover. Replication should be based on locally verified incident data, breeding-risk information, farmer participation, clear protocols with the competent Forest Department and monitoring of outcomes. Navsari's incident and rescue figures should not be transferred to another landscape without local assessment.

Local Evidence
Verify incident and habitat data

Seasonal Timing
Align action with crop operations

Farmer Networks
Maintain trusted reporting channels

Authorised Response
Coordinate with the Forest Department

Long-term Learning
Track outcomes and adapt measures

The business case for coexistence

Livelihood Resilience
Target action where livestock-loss exposure is concentrated

Biodiversity Value
Protect cubs using agricultural land as breeding habitat

Decision-useful Data
Use spatial evidence to prioritise villages and timing

Stakeholder Trust
Connect farmers, field teams and government response

Linkages with GBF and India's NBSAP

1 Biodiversity-inclusive Planning
Spatial risk mapping supports targeted management of agricultural areas

4 Species & Coexistence
Cub conservation and management of human–wildlife interactions

9 Benefits & Coexistence
Depredation-reduction action seeks to lower livelihood costs

10 Sustainable Agriculture
Breeding-risk information supports wildlife-sensitive harvesting

21 Knowledge
Risk findings are shared with government and community stakeholders

22 Participation
Farmer reporting and recognition enable local action

> ***At Astral, we believe growth cannot come at the expense of the ecosystems where communities and businesses operate. In Navsari, Astral Foundation supports a nature-positive approach that treats protecting farmers' livelihoods and protecting leopards as interconnected goals. Through field-based evidence, spatial risk assessment, farmer awareness, and community-led reporting, the initiative translates scientific understanding into practical action, identifying where livestock depredation occurs and where leopard cubs most need to be conserved, to guide targeted interventions. Our team works hand in hand with the Gujarat Forest Department across every stage of this work. By recognizing farmers who report leopard cubs before Crop harvesting, Astral foundation strengthens community participation in conservation. This reflects our commitment to responsible, evidence-based investment in nature, scaling approaches that benefit both biodiversity and local communities.***
>
> *Kairav Engineer, Executive Director, Astral Limited*

Coexistence improves when conservation addresses both sides of shared risk

By linking spatial evidence, wildlife-sensitive agricultural practices, farmer reporting and government-led response, the Navsari initiative connects leopard-cub conservation with protection of rural livelihoods.



Recognition of a farmer for supporting leopard cub conservation



Rescued leopard cub during field visit

Restoring the Refuge

A Multi-Stakeholder Approach to Wetland Conservation

JHAJJAR, HARYANA

10 acres
water hyacinth removed

438
native saplings planted

3.1 million
native fish seed released

15
monitoring and rescue tools

3
visitor-awareness signboards

A Ramsar wetland with regional ecological value

Bhindawas Wildlife Sanctuary is a human-made freshwater wetland and the largest wetland in Haryana. Located in Jhajjar district, the Sanctuary supports resident and migratory waterbirds and provides habitat for more than 250 bird species, including globally threatened species. Its Ramsar values include biodiversity support, groundwater recharge and discharge, local climate regulation, nutrient cycling and flood control.

Restoration Focus

Bhindawas Wildlife Sanctuary

Restoration Objective

Support restoration and conservation of Bhindawas through a multi-stakeholder partnership that improves habitat condition, strengthens biodiversity management and sustains wetland ecosystem services.



Location of Bhindawas Wildlife Sanctuary in Haryana



The conservation challenge

Wetland conditions can be affected when invasive aquatic vegetation obstructs open-water areas, sunlight penetration and oxygen exchange. Habitat quality also depends on suitable vegetation, functioning food webs, informed visitor behaviour, and operational capacity for wildlife observation, patrolling and rescue.

The project therefore combines ecological action with management support rather than treating restoration as a single intervention.

Partnership Architecture

Under the India Wetland Coalition, Private sector committed to support for conservation activities; the Haryana Forest Department provided approvals and technical guidance; CII–ITC CESD facilitated the partnership and technical knowledge; and CII Foundation supported implementation on the ground. The project is presented as the first Ramsar wetland conservation collaboration under IWC.

Business Value of Wetland Conservation

The project positions wetland conservation as investment in natural infrastructure. Protecting hydrological function supports water resilience and flood buffering; habitat management supports biodiversity and nature-related commitments; and public-private collaboration helps translate corporate finance into site-level action under government guidance.

A Five-Step Conservation Response

Remove Invasives
Manual removal of water hyacinth from 10 acres identified with the Forest Department

Strengthen Habitat
Planting of 438 native saplings, with tree guards, irrigation and survival monitoring

Support Food Webs
Release of 3.1 million zero-size native fish seed to support aquatic productivity and bird food resources

Build Field Capacity
Provision of binoculars, range finders, walkie-talkies and snake-rescue kits

Inform Visitors
Installation of three signboards on wetland value, biodiversity and responsible behaviour

From restoration activity to wetland function

The intervention package connects site-level action with the ecological functions that make Bhindawas valuable to nature, communities and the regional economy. The expected contribution pathway is presented below; long-term outcomes require continued monitoring.

Open Water & Oxygen
Invasive removal reduces dense surface cover and can improve conditions for aquatic life

Habitat Complexity
Native trees add structure, shelter and potential food resources along selected areas

Aquatic Food Web
Fish-stock enrichment is intended to support aquatic productivity and piscivorous birds

Management Capacity
Equipment and communication tools support observation, surveys and coordinated response

Implemented actions and management safeguards

Invasive-Species Management
A 10-acre area was selected in consultation with the Forest Inspector. Water hyacinth was removed manually. Periodic inspection will be important because invasive aquatic plants can re-establish and require adaptive follow-up.

Native Plantation
A total of 438 saplings were planted, including Arjun, Jamun, Peepal, Banyan, Guava, Ber, Pilkhan, Kadamba, Neem, Shisham, Bamboo and Amla. The submitted plan includes irrigation every 15 days, survival tracking and replacement where required.

Aquatic Enrichment
The project procured and released 3.1 million zero-size fish seed, including Rohu, Catla, Mrigal and Common Carp. Future monitoring should distinguish the intended food-web contribution from observed changes in fish survival, bird use and water quality.

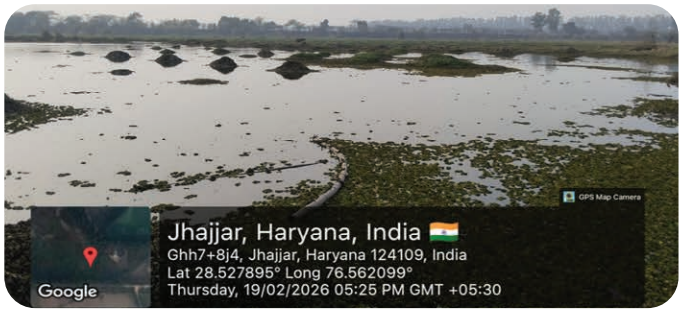
Monitoring & Rescue Support
Fifteen items were handed over to Forest Department personnel: three snake-rescue kits, four binoculars, six walkie-talkies and two laser range finders. The tools support observation, distance estimation, communication and authorised rescue response.

Awareness & Responsible Use
Three signboards were installed to communicate wetland values, biodiversity information and responsible visitor behaviour. Signage also provides a visible connection between conservation action and stakeholder participation.

Post-Implementation Management
Project documentation and assets were handed over to sanctuary management. Continuing responsibilities include plantation care, irrigation, survival monitoring, replacement of failed saplings, surveillance of invasive regrowth and use of monitoring equipment.



Meeting with forest officials to discuss the project activities



Invasive species removal- before and post intervention



Release of native fish seed



Native plantation activity



Equipment handover and field use



Installation of awareness signages

A replicable public-private framework for Ramsar-site action

The Bhindawas model shows how a business platform can combine corporate finance, government stewardship, technical facilitation and field implementation around an agreed package of wetland actions. Replication at other wetlands would require site-specific ecological assessment, alignment with the forest department/wetland authority, appropriate safeguards and outcome monitoring rather than direct transfer of intervention quantities.

Linkages with GBF and India's NBSAP



Ecosystem Restoration
Invasive removal and habitat enhancement support recovery of wetland ecological condition



Area-based Conservation
Action supports management of Ramsar Site and Wildlife Sanctuary



Invasive Alien Species
Water-hyacinth removal addresses a priority invasive pressure



Nature's Contributions
Wetland function supports biodiversity, groundwater recharge and flood buffering



Business Action
The Company's CSR funds are channeled into measurable site-level biodiversity action



Knowledge & Monitoring
Equipment, signage and follow-up indicators support knowledge and management

Core Message

Water Security
Support wetland storage, recharge and hydrological regulation

Flood Mitigation
Maintain natural buffering capacity within the regional landscape

Biodiversity Enhancement
Improve habitat conditions and management support for wetland species

Business Resilience
Invest in natural infrastructure through a governed partnership model

Beyond Flagship Species

A science-based approach to monitor lizard conservation in an industrial landscape

BUDGE BUDGE, WEST BENGAL

33%
campus under green cover

30
GIS-based monitoring grids

2
protected monitor species

4
biodiversity monitoring method

Budge Budge Generating Station (3X250MW) is an operational thermal power facility with ponds, wetlands, native vegetation, plantation areas and a Miyawaki forest. Together, these features create a mosaic of aquatic and terrestrial habitats within the industrial campus.

Biodiversity monitoring has recorded the Bengal monitor (Varanus bengalensis) and Asian water monitor (Varanus salvator). Both species are protected under Schedule I of India's Wildlife (Protection) Act, 1972.

Conserving the overlooked

The project directs conservation attention towards reptiles, a group that receives less visibility than many flagship mammals and birds. The case recognises ecological significance and legal protection, rather than public visibility, as a basis for action.

Restoration Focus

To build an evidence base on monitor lizard occurrence and habitat use, identify priority areas, and use the findings to guide habitat management within an operational power facility.

Why action was needed

Historical imagery reviewed for the case study indicated growth in settlements within 100 metres of the station boundary, from approximately 7 hectares in 2011 to 13 hectares in 2026. The observed change points to increasing development pressure around the campus and adds relevance to the habitats retained within the site.

Threats to Monitor Lizards in and around the Site

Fragmentation
Reduced connectivity between habitat patches

Disturbance
Wildlife movement through operational areas

Infrastructure
Interaction with internal roads and railway tracks

Misconceptions
Risks arising from perceptions of reptiles to be dangerous

Species and habitat use

Preliminary observations associate Asian water monitors mainly with ponds and wetlands and Bengal monitors frequently with vegetated areas. Both species have also been recorded at the waste aggregation site. Multi-season assessment remains underway.



Monitoring grid map



Asian water monitor

From observation to conservation action

A structured programme combining ecological assessment, geospatial evidence, employee participation and targeted site measures

Assess
Habitats and vegetation

Map
Species occurrence

Monitor
Non-invasive surveys

Engage
Employee observations

Act
Targeted site measures

Building the evidence base

The campus has been divided into 30 GIS-based grids to provide a consistent spatial framework for surveys. The monitoring methods - Employee questionnaires, Camera traps, line-transect surveys, habitat assessments, and GPS-enabled records are used to document occurrence and examine habitat-use patterns without capturing or handling animals (non-invasive method).

Employees complement specialist surveys by reporting, photographing and geo-tagging sightings. Questionnaire responses also capture knowledge of locations where monitor lizards have been encountered. Technical guidance is provided by the Nature Environment & Wildlife Society (NEWS).



Field monitoring



Employee participation

Translating evidence into site measures

The scrapyard area was transformed into a bamboo plantation area to increase vegetation cover and habitat structure. Bengal monitors have subsequently been recorded using the vegetated area. Continued monitoring is required to assess associated ecological change.

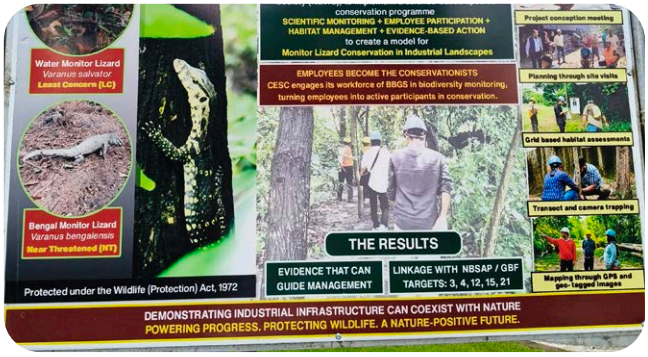
Awareness signs communicate the protected status and ecological relevance of monitor lizards. Reflective signs along the internal railway track are intended to alert locomotive operators and reduce wildlife-safety risks.



Before: Scrapyard before vegetation establishment



After: Bamboo plantation and verified habitat-use record



Awareness Board on Monitor Lizards



Reflective Sign Along Railway Tracks

Emerging value

- Occurrence records established for both focal monitor species
- Habitat-use information being developed through field and geospatial methods
- Employee participation integrated into biodiversity monitoring
- Site measures introduced for habitat enhancement and wildlife awareness

Linkages with GBF and India's NBSAP

4 Species
Protected species monitoring and site-level protection measures

12 Habitats
Management of wetlands, vegetation and plantation areas.

15 Business
Biodiversity assessment is integrated into operational management

21 Knowledge
Grid-based records and geospatial evidence for decisions

At CESC, we see biodiversity conservation as an integral part of our business operations. BBGS has consistently undertaken initiatives to preserve and enhance the life surrounding the facility as part of its ESG commitment. When we discovered Schedule-I monitor lizards, also globally threatened due to habitat loss, sharing our campus, we initiated a conservation programme and collaborated with a scientific partner to ensure their proper protection. I take immense pride in our team's achievements, which reflect our commitment to sustainability and demonstrate that an operational power station can also be a credible steward of nature. We remain committed to strengthening these efforts through continuous monitoring and proactive conservation.

Brajesh Singh, MD Generation, CESC Limited

The case extends corporate biodiversity attention beyond flagship species and places protected reptiles within a structured system of monitoring, employee participation and industrial habitat management.





Nature as Destination

ClubMahindra

A landscape-level approach to nature-related assessment and action

KERALA

Tourism businesses depend on healthy landscapes, functioning ecosystems, water availability, destination identity and the quality of the guest experience. For hospitality, biodiversity is not only an environmental asset; it underpins the tourism product, destination resilience, brand value and business continuity.

A geographically diverse hospitality portfolio

Club Mahindra provides access to more than 140 resorts across India and abroad. This geographically diverse portfolio spans hill stations, beaches, backwaters, jungles, waterfronts and international locations, placing the hospitality business in direct relationship with varied landscapes, ecosystems and nature-related dependencies.

140+
resorts

6
kerala resorts

2
ramsar landscapes

TNFD
Leap approach

Kerala cluster: one portfolio, multiple ecosystems

Across six Kerala resorts, the cluster approach considers diverse landscapes, including backwater, coastal, riverine and wetland settings. Munnar and Thekkady represent highland and forest-linked landscapes; Ashtamudi and Arookutty interface with backwater systems; Cherai lies between the coast and Vembanad–Kol; and Poovar brings together river, backwater and marine influences. The cluster also interfaces with 2 Ramsar landscapes, Ashtamudi and Vembanad–Kol, enabling nature-related risks and ecological values to be considered beyond individual property boundaries.



TNFD-based cluster risk assessment

- All six resorts were covered through a cluster approach rather than assessed only as isolated properties
- The TNFD LEAP approach was used to locate nature interfaces, evaluate dependencies and impacts, assess risks and opportunities, and inform preparedness and action
- The assessment considered Ramsar wetlands, Western Ghats linkages, ecological values within and around resorts, operational pressures and stakeholder interfaces
- Findings informed resort-specific interventions and common actions on water, waste, sourcing, mobility, pollution prevention, visitor behaviour and nature interpretation

Policy foundation

The Biodiversity Policy commits to the mitigation hierarchy, control of invasive non-native species, Biodiversity Management Plans with targets, stakeholder collaboration, biodiversity information, performance monitoring and communication across properties and the supply chain.

Ecological value of the six resorts

Munnar
Located in Idukki district at nearly 1,600 metres above sea level, the resort is set among tea slopes, shola forests and the Anayirangal Dam landscape. The resort campus recorded 145 species: 70 plant species and 75 faunal species, including endemic and conservation-significant species

Thekkady
Located at the edge of the Periyar Tiger Reserve amid cardamom-covered hills, bamboo groves and moist deciduous forest. The assessment recorded more than 70 floral species and 75 faunal species, including native and endemic elements

Poovar
At the southern tip of Kerala, the resort is positioned where the Neyyar River embraces the Arabian Sea, between calm backwaters and the coast. The assessment recorded 125 species: 79 floral species and 46 faunal species

Ashtamudi
Situated along Ashtamudi Lake, a Ramsar Wetland and Kerala's second-largest estuary. The wider lake supports 40+ plant species, 116 bird species and nearly 100 fish varieties. The resort and surrounding area recorded 107 species: 80 floral and 27 faunal species

Arookutty
Tucked within Kerala's Alappuzha district, the resort lies along the Vembanad–Kol Wetland Complex, a Ramsar Site. The assessment recorded 91 species: 55 floral species and 36 faunal species

Cherai
The resort lies between Cherai Beach and the backwaters of the Vembanad–Kol Ramsar wetland complex, where lagoon and sea are separated by only a few hundred metres. The setting integrates coastal and freshwater influences

From ecological insight to place-based conservation action

Munnar
Neelakurinji (***Strobilanthes kunthiana***) recorded within the premises is conserved. Local community members support guest treks as nature guides and interpret native ecosystems

Thekkady
About 80% of food waste is supplied to local pig farms; 20% is converted to compost and manure for in-house farming, reducing attractants for feral animals

Poovar
Guest SOPs for boating, wild treks and recreation prohibit feeding wild fauna, birds and fish

Ashtamudi
Low-height, oriented roadside lighting reduces disturbance to nocturnal fauna. Solid-waste removal around wetland areas is undertaken with local communities

Arookutty
Community lake-cleaning removes plastic waste and water hyacinth. An on-site biogas plant converts restaurant and canteen food waste into cooking gas

Cherai
Native plant seeds are distributed to guests. Hand-rowed houseboats avoid fuel-based engines and engage local communities



Scaling nature-positive hospitality across the resort network

Sustainable Sourcing
Sustainable Fish and Vegetable Sourcing: Resort is sourcing the vegetables and fishes sustainably from local communities. This initiative supports livelihood of communities. The resort also has Sustainable Fish Sourcing Certificate. These sourcing practices aim to reduce pressure on lake resources

Rainwater Harvesting
Rainwater storage reduces dependence on natural freshwater sources

Plastic Reduction
Resorts are moving towards plastic-free operations through guest sensitisation, entry-point controls and signage

Water Circularity
Treated sewage is reused for irrigation, reducing freshwater demand and avoiding wastewater discharge to freshwater ecosystems. Sludge is used as garden manure

Low-impact Mobility
Electric vehicles and charging infrastructure reduce local air and noise pollution within resort premises

Nature Interpretation
Guided experiences, wetland and Western Ghats awareness, seed distribution and activity-specific instructions connect hospitality with responsible behaviour

Stakeholder engagement

The cluster approach connects resort teams, guests, local communities, nature guides and suppliers. Community participation is reflected in lake-cleaning, hand-rowed boating, sustainable sourcing and guided nature experiences. Guest engagement is supported through signage, seed distribution, nature interpretation and activity-specific codes of conduct.

Nature-positive hospitality at landscape scale

The Kerala cluster shows how a hospitality portfolio can move from property-level environmental measures towards a landscape-oriented understanding of nature. The LEAP-based assessment combines ecological baselines, site-specific conservation practices, common operating measures and stakeholder engagement across wetland, coastal and Western Ghats settings.



Linkages with GBF and India's NBSAP

Biodiversity-inclusive Planning
Cluster-level LEAP assessment considers Ramsar wetlands, Western Ghats linkages and sensitive landscape interfaces

Invasive Alien Species
Water-hyacinth removal at Arookutty and the policy commitment on invasive non-native species support control measures

Pollution Reduction
Wastewater treatment, plastic reduction, waste removal, biogas, e-mobility and non-motorised boating address local pollution pressures

Ecosystem Functions And Services
Water conservation, wetland stewardship and ecosystem-based actions support water regulation, resilience and destination value

Business Assessment and Action
TNFD-based risk assessment, Biodiversity Management Plans, monitoring and disclosure readiness align with business action on nature

Knowledge and Awareness
Nature guides, guest SOPs, signage, seed distribution and interpretation support biodiversity information and awareness





From Barren Land to Verdant Campus

Infosys
Navigate your next

A case study in vision, perseverance and ecological restoration

MANGALURU DISTRICT, KARNATAKA

~355 acres
campus landscape

~85%
vegetated conservation space

565,000+
mapped plants

373
tree species

281
native tree species

Infosys is a global digital services leader that has pioneered corporate sustainability. Infosys integrates biodiversity preservation into its broader environmental, social, and governance (ESG) Vision 2030 framework. The company focuses on urban campus conservation, native ecosystem restoration, and multi-sector collaboration. The company achieved carbon neutrality in 2020 and maintaining it for multiple consecutive years

At the time of acquisition in 2005, the Mangaluru site was a hard lateritic landscape with barren hillocks, exposed rock, negligible topsoil, low water-retention capacity and sparse vegetation. Seasonal rainfall generated rapid monsoon runoff, while the dry season brought water stress. The site appeared unsuitable for creating a diverse and resilient ecological landscape.

Infosys chose not to adopt a conventional ornamental-landscaping response. The ambition was to build a functioning ecosystem inspired by the Western Ghats, integrating biodiversity, soil improvement, water management and campus development. Environmental stewardship was treated as part of infrastructure planning rather than an addition after construction.

Restoration Focus

Western Ghats-inspired native biodiversity

Restoration Objective

Transform a degraded lateritic site into a biodiverse, water-resilient campus through native and conservation-important planting, soil and moisture improvement, rainwater harvesting, ecological monitoring and long-term maintenance.



2006



2020

The challenge: restoring ecological function on laterite

The terrain was undulating and dominated by hard laterite. Planting required pits to be excavated through rock and filled with suitable soil and organic amendments. Young plants also had to withstand intense monsoons and prolonged dry periods. Restoration therefore required more than planting numbers; it demanded suitable species, improved rooting conditions, moisture conservation, irrigation and repeated care over many years.

The project also had to establish diversity rather than a simplified plantation. Species selection prioritised native and endemic flora, conservation-important trees, fruit-bearing species, shrubs, climbers, palms, bamboo and plants supporting pollinators and other fauna. The intention was to develop layered habitat and ecological processes that could become increasingly self-sustaining.

Degraded Soil
Hard laterite, limited topsoil and difficult rooting conditions

Water Stress
Rapid runoff during monsoon and dry-season scarcity

Low Starting Diversity
Sparse vegetation and limited habitat structure

Long Time Horizon
Restoration required sustained maintenance and replacement

A science-led pathway from barren land to living ecosystem

The transformation progressed through a connected sequence: set an ecological vision, build partnerships, select suitable species, improve soil and moisture conditions, harvest water, create habitat layers, support pollination and monitor the resulting landscape.

Envision
Set a Western Ghats-inspired restoration ambition

Partner
Bring forest and scientific expertise into planning

Establish
Prepare laterite, soil and moisture for planting

Diversify
Create layered native and conservation collections

Secure Water
Harvest rainfall and recharge the landscape

Monitor
Map plants and document biodiversity response

Partnerships converted ambition into implementation

The Karnataka Forest Department supported procurement of endemic and conservation-important planting material during the early stages. The Central Plantation Crops Research Institute in Kasaragod and the Indian Council of Agricultural Research–Directorate of Cashew Research in Puttur provided scientific inputs on species selection and ecological management. Botanists, taxonomists, nursery specialists, landscape consultants, plantation experts, contractors and maintenance partners contributed specialist knowledge and implementation capacity. Field teams worked under demanding conditions, excavating pits in rock, transporting soil, nurturing young plants through seasonal extremes, and replacing plants where necessary. The collaboration illustrates that restoration at campus scale depends on institutional knowledge, technical expertise and disciplined execution over time.

Species diversity and soil preparation were designed together

Species selection prioritised native and endemic flora of the Western Ghats, conservation-important and threatened species, and ecological diversity across plant families and functions. Planting pits were enriched with organic matter, farmyard manure, beneficial microorganisms, charcoal and mulch to strengthen soil conditions and moisture retention. Drip irrigation, coconut-shell moisture conservation, mulching and nitrogen-fixing plants were used to improve establishment and survivability.

Specialised Bambusetum and Palmetum collections were developed alongside shrubs, climbers, medicinal plants, butterfly-attracting species and fruit-bearing plants. This created multiple vegetation layers and resources for birds, mammals, reptiles, amphibians and insects rather than a uniform tree plantation.

373 Tree Species
Including 281 native species

64 Shrub Species
Additional lower vegetation structure

51 Palm Species
Diversity within specialised collections

11 Bamboo Species
Bamboo diversity within the landscape

Water management created the foundation for greening

Six major rainwater-harvesting ponds were created with a combined storage capacity of approximately 668 lakh litres. Percolation tanks, trenches, recharge structures, ponds and check dams were designed to slow runoff and increase infiltration. The guiding philosophy was to “make the running water walk, the walking water wait, and the waiting water stop.”

Vegetation and water systems were designed to reinforce one another. Canopy development can reduce evaporation and surface runoff, while captured rainfall supports soil moisture and recharge. The submitted case material reports that horizontal wells at the site became productive again and that surrounding villages experienced improved drinking-water availability, including during summer. These reported outcomes should be supported through hydrological records where available.

6
Harvesting Ponds
Major storage structures within the campus

668 lakh litres
Combined Capacity
Approximate rainwater-storage capacity

Multiple Recharge Structures
Trenches, percolation tanks and check dams

Ecological processes were supported

Apiculture was introduced to support pollination and plant reproduction. Fruit-bearing, flowering and butterfly-attracting species expanded food and habitat resources. Plant mapping and geocoding created a record of the landscape, while biodiversity observations documented the presence of birds, mammals, reptiles and amphibians. The result is presented as an increasingly complex habitat mosaic rather than a conventional landscaped campus.

Measurable transformation

The campus now extends across approximately 355 acres, with nearly 85% described as vegetated conservation space. More than 565,000 mapped and geocoded trees and shrubs and a diverse assemblage of plant and animal species. These figures indicate the scale and diversity of the intervention; continuing monitoring is needed to assess ecological condition, survival, regeneration and long-term trends.

Reported biodiversity outcomes

- 373 tree species, including 281 native species and 60 species endemic to the Western Ghats.
- 64 shrub species, 51 palm species and 11 bamboo species.
- 6 Critically Endangered, 13 Endangered, 23 Vulnerable and eight Near Threatened tree species reported within the collections.
- 148 bird species, 16 mammal species, 30 reptile species and 14 amphibian species recorded.
- More than 565,000 plants mapped and geocoded across the campus landscape.
- A dense canopy and habitat mosaic developed on land that was initially characterised by exposed laterite and sparse vegetation.

Linkages with GBF and India's NBSAP

2 Ecosystem Restoration
Long-term restoration of a degraded lateritic site

3 Area-based Conservation
Large campus areas managed for habitat and biodiversity values

4 Species Conservation
Native, endemic and threatened plant species maintained

11 Nature's Contributions
Vegetation and water systems support ecosystem-service functions

12 Green Spaces
Biodiversity-rich green space integrated into a corporate campus

15 Business Action
Biodiversity and water considerations incorporated into infrastructure management

20 Capacity & Cooperation
Forest, research and technical partners supported implementation

21 Knowledge
Plant mapping, geocoding and biodiversity inventories support learning

Ecological restoration is long-term infrastructure investment

By integrating native biodiversity, water harvesting, scientific expertise and patient stewardship, Infosys transformed a difficult lateritic site into a living campus that supports water resilience, biodiversity and organisational learning.



Integrated Biodiversity Approach

Climate–Water–Nature Nexus

ITC Limited is a diversified enterprise with businesses across FMCG, Agri-Business, Paperboards & Packaging and Information Technology. The company recognises dependencies and impacts associated with agricultural landscapes, forest resources, water and ecosystem services. Biodiversity conservation and sustainable natural-resource management therefore form part of long-term business resilience and growth.

Sustainability 2.0: integrating climate, water and nature

ITC's Sustainability 2.0 framework applies a Climate–Water–Nature Nexus approach. The strategy connects nature-based solutions, ecosystem restoration, carbon sequestration, biodiversity conservation, water security and resilient livelihoods, while addressing risks within operations, agricultural value chains and priority landscapes.

8.10 lakh+
biodiversity revival and conservation

1.48 mn
acres of forestry coverage

1,900
acres of mangroves

1,520 million kl
potential crop water usage saved

Why a landscape and value-chain approach?

- Agricultural productivity, water security and climate resilience depend on natural drainage, soil health, groundwater recharge, native forests and habitat connectivity
- Pollinators, beneficial insects, birds and reptiles support ecological balance and productive agricultural systems
- Healthy ecosystems regulate water flows, store carbon and reduce vulnerability to climate impacts
- Action therefore extends beyond individual farms and facilities to the wider landscape and value chain

Three integrated intervention models

Rejuvenate commons
Restore degraded village landscapes and livelihoods

Coastal nature-based solutions
Restore mangroves and enhance climate resilience

Resilient value chains
Integrate water stewardship, agriculture and forestry

Rejuvenating commons, restoring livelihoods

The landscape challenge

In the semi-arid landscapes of Rajasthan, degradation of village commons had contributed to declining vegetation cover, reduced soil moisture, groundwater depletion and greater exposure to drought. The intervention addressed ecological decline and livelihood vulnerability as connected landscape issues.

Assessment-to-action process

- Identify degraded common lands and related water, soil, vegetation and livelihood pressures
- Apply assisted natural regeneration and pasture development to improve vegetation and habitat condition
- Install soil- and water-conservation measures and water-harvesting structures
- Establish community stewardship mechanisms to support long-term management
- Track landscape coverage and connect biodiversity, water, climate and livelihood outcomes

From degraded commons to functioning landscapes

The intervention improved vegetative cover, reduced land degradation and restored habitat. Better infiltration and groundwater recharge supported water security, while recovering vegetation improved fodder availability and climate resilience. Community-led stewardship provides the institutional basis for maintaining the restored commons.

1.63 lakh+
Acres conserved during the year

8.10 lakh+
Acres covered under biodiversity conservation

10
Indian states

Biodiversity plot, Jhalawar, Rajasthan

The Jhalawar biodiversity plot illustrates the transition from degraded land towards improved vegetation and ecological function through restoration, water conservation and local stewardship. The reported results describe programme-level changes and do not by themselves quantify species recovery or independently verified ecological condition.



Biodiversity plot in Jhalawar, Rajasthan (Before)



Biodiversity plot in Jhalawar, Rajasthan (After)

Biodiversity
Habitat recovery and vegetation improvement

Water
Infiltration, recharge and moisture retention

Climate
Carbon sinks and drought resilience

Livelihoods
Increased fodder availability

Community
Local stewardship mechanisms

Business
More resilient sourcing landscapes

Nature-based solutions for coastal resilience

Restoring mangroves at Bapatla, Andhra Pradesh

Mangroves regulate saline-water intrusion, reduce soil erosion, support aquatic and terrestrial biodiversity and sustain local livelihoods. ITC launched a mangrove-restoration initiative in Bapatla in FY 2023–24. The intervention has cumulatively covered 1,900 acres.



Mangrove plantation in Fishbone method, Bapatla district, Andhra Pradesh (Before)



Mangrove plantation in Fishbone method, Bapatla district, Andhra Pradesh (After)

Restoration and species protection

The initiative restores and protects coastal habitat, including ecologically significant areas associated with Olive Ridley turtle conservation.

Community-based monitoring connects mangrove stewardship with protection of turtle-nesting habitat.

- Mangrove restoration applies the fishbone method to support hydrological flows and vegetation recovery.
- Sixty-two community volunteers have been trained and deployed to monitor mangroves and safeguard turtle-nesting habitats.
- Olive Ridley turtle eggs are protected from natural predators through managed hatcheries.
- Hatchlings are subsequently released into the sea as part of the conservation programme.

1,900
Acres of mangroves

62
Community volunteers

8,066
Olive ridley hatchlings released

Resilient water, agriculture and forestry value chains

ITC integrates water stewardship, regenerative and climate-smart agriculture, sustainable forestry and ecosystem management across priority geographies. Supply-side measures improve recharge and water availability, while demand-side engagement with farmers seeks to improve crop water-use efficiency. Forestry programmes expand tree cover and carbon sequestration while supporting landscape resilience.

1.48 million acres
Cumulative forestry coverage through Social and Farm Forestry and related initiatives

Almost 6×
Rainwater-harvesting potential relative to net water consumption from operations

1.50 million acres
Forestry coverage target for 2030

1,520 million kl
Potential water usage saved through demand-side agricultural interventions, against a 2,000 million kl target by 2030

Linkages with GBF and India's NBSAP



Restore Degraded Ecosystems
Commons restoration and the 1,900-acre mangrove programme support ecosystem restoration



Climate Action Through Nature
Mangroves, forestry, soil-water conservation and regenerative landscapes support climate resilience and carbon sinks



Sustainable Agriculture and Forestry
Climate-smart agriculture, crop-water efficiency and Social and Farm Forestry support productive landscapes



Nature's Contributions to People
Water recharge, erosion control, soil moisture, fodder and coastal protection support ecosystem functions and services



Business Assessment and Action
The nexus approach integrates nature-related dependencies, risks and actions into business and value-chain management



Inclusive participation
Community stewardship of commons and 62 coastal volunteers support participation in biodiversity action

Nature-positive contribution at scale

Across commons, coastal ecosystems and agricultural and forestry value chains, the Climate–Water–Nature Nexus links ecosystem restoration with water security, carbon sequestration, biodiversity conservation and resilient livelihoods. The approach demonstrates how nature-related action can be designed around connected landscapes rather than isolated projects.

Biodiversity at the Source

Strengthening spice landscapes through risk mapping, native planting and collective action

For a herbs and spices exporter, biodiversity underpins production-system health, crop productivity and supply-chain security. Climate change, deforestation and degradation, and depletion of natural resources can weaken sourcing landscapes. Jayanti links biodiversity action to its Responsible Sourcing pillar, combining farm-level assessment, native-species interventions and stakeholder participation.

4,201.49 ha
farm area assessed

4
sourcing assessment entries

0.35 ha
biodiversity park

310
native plants in park

A landscape and supply-chain approach

- Increase green cover within farming areas to support productivity and reduce crop damage
- Enhance local biodiversity through native-species planting and weed management
- Support microclimate regulation and carbon sequestration
- Create livelihood opportunities for farmers through plantation initiatives

Biodiversity risk mapping across sourcing regions

Periodic biodiversity assessments are conducted through a digital traceability platform. The assessment records native and endemic species on farms and within a radius of up to 7 km, identifies vulnerable or high-biodiversity-value species, evaluates deforestation, degradation and land-use-change risks, and supports monitoring and recommendations at farm level.

Region / commodity	Farm area	Native / associated species recorded	Invasive species recorded
Andhra Pradesh | Chilli	190.4 ha	Neem, Pongamia, Banyan	Lantana, water hyacinth
Andhra Pradesh | Black Pepper	1,941.6 ha	Coffee, Turmeric, Jackfruit, Neem	Silver oak
Rajasthan | Cumin, Psyllium, Fenugreek, Dill	1,954.8 ha	Khejri, Ber, Rohida, Neem	None identified
Tamil Nadu | Turmeric	114.69 ha	Coconut, Neem, Banyan	None identified

From risk identification to place-based conservation

A living repository of desert-region native plants

Rajasthan is identified in the case material as a critical sourcing location for spices and oilseeds, with growing temperatures, erratic rainfall and water scarcity creating risk for production landscapes and desert biodiversity. In 2025, Jayanti established a biodiversity park at Kuchhri Village, Jaisalmer, as a model ecosystem site and living repository of native plant diversity.

2025
Year established

0.35 ha
Park area

310
Native plants

7+
Named native species

The planting palette includes Neem, Khejri, Rohida, Gulmohar, Pipal and Imli, together with other native species. Intended outcomes include ecological awareness among farmers, communities and children; conservation of regionally appropriate species; local biodiversity enhancement; microclimate regulation; and future carbon-sequestration opportunities.



Before park establishment



Early establishment stage



Vegetation within the sourcing landscape

Community planting and green corridors

Planned initiative in Tamil Nadu

A community plantation is planned in the village of Coimbatore, in collaboration with local government, as per the gram panchayat guidance. The programme proposes planting 3000 trees across community corridors. Species selection follows local horticulture-department recommendations, while Jayanti will undertake maintenance and management. The initiative is intended to contribute to the Green Tamil Nadu Mission.

3000
Trees planned

1
Community-corridor programme

Local
Government collaboration

IPPL (Jayanti)
Maintenance responsibility

Stakeholder participation across the sourcing network

Annual plantation drives engage employees and suppliers, largely farmers. The supplied case material records approximately 2,000–3,000 plants distributed and planted over a three-year period. The programme reaches nearly 3,000 farmers across sourcing regions and is positioned to build biodiversity awareness, environmental responsibility, ecosystem-service benefits and opportunities for supplementary income.



Community awareness activity

Connected value: nature, farm resilience and responsible sourcing

How the interventions connect

Digital risk mapping identifies the ecological context and priority pressures across sourcing landscapes. Native planting then translates assessment into site-level action, while the biodiversity park provides a demonstration and awareness platform. Community corridors and annual plantation drives extend participation beyond individual farms. Together, the interventions connect biodiversity conservation with sourcing resilience, stakeholder engagement and farm-linked livelihood opportunity.

Linkages with GBF and India's NBSAP

The case aligns with NBSAP implementation themes concerning restoration of degraded ecosystems, sustainable agriculture, invasive-species management, business assessment of biodiversity dependencies and impacts, access to biodiversity knowledge, and participation of local stakeholders.

1 Biodiversity-inclusive Planning
Farm and 7 km radius assessment supports location-based risk identification

2 Ecosystem Restoration
Native planting, the biodiversity park and planned green corridors support restoration intent

6 Invasive Alien Species
Recording Lantana, water hyacinth and silver oak supports identification and management attention

8 Climate Resilience
Green cover, microclimate regulation and carbon sequestration are identified intervention aims

10 Biodiversity-friendly Agriculture
Responsible sourcing and farm-level biodiversity measures support sustainable production landscapes

11 Ecosystem Services
Planting is intended to support microclimate regulation, carbon sequestration and productive landscapes

15 Business Assessment and Action
Supply-chain biodiversity assessment links nature-related risk with sourcing decisions and improvement recommendations

21 Knowledge and Awareness
Digital traceability, assessment records and awareness activities support biodiversity information and learning

22 Inclusive Participation
Farmers, suppliers, employees, communities, children and local government are included in action and awareness

Nature degradation is a constant threat to agricultural supply chains, driven by climate change, intensive farming, and pollution. Our Biodiversity Action is guided through a practical way of planning, implementing, and measuring conservation initiatives, while strengthening the landscapes we source from. It is cost-effective and benefits farmers, their farms, and the wider community. We are already seeing improved farmer incomes and better-quality produce, while native species plantations are adding green cover and capturing carbon. For an agri-business like ours, this is a real competitive advantage in the growing market for sustainable products.

Komal Shah, Whole Time Director, Jayanti Herbs & Spice

Measuring Progress towards No Net Loss

Biodiversity impact quantification in a credible, consistent and scalable manner

2023
initiative launched

13
iron ore mines

3
integrated steel plants

1
downstream rolling facility

1-5
habitat-condition scale

JSW Steel Ltd is one of India's leading steel manufacturers and the flagship business of the JSW Group. The company operates a highly advanced, integrated steel production network across India and has achieved the global ResponsibleSteel™ Certification for its primary manufacturing hubs. Located in Toranagallu, Ballari district, Karnataka, Vijayanagar Works is JSW Steel's flagship facility and India's largest single-location integrated steel plant, operating at a massive capacity of 13 MTPA (Million Tonnes Per Annum).

Steel production interacts with nature through raw-material extraction, energy production, industrial operations and associated infrastructure. These activities can alter ecosystems, affect species and create nature-related risks. JSW Steel integrated biodiversity into its business strategy and enterprise risk management framework and adopted an enterprise-wide ambition to achieve No Net Loss of biodiversity by 2030.

A commitment alone, however, does not show whether ecological condition is improving. In 2023, the company launched a science-based biodiversity impact quantification initiative to establish a consistent basis for assessing habitats, quantifying positive and negative footprints, setting a baseline and tracking change. The wider programme considered three integrated steel plants, one downstream rolling facility and 13 mines across Karnataka and Odisha, with first-phase implementation initiated at Vijayanagar Works.

Restoration Objective

Develop a credible, consistent and scalable framework that translates habitat extent and ecological condition into quantified biodiversity footprints and uses the results to guide action towards the 2030 No Net Loss ambition.





The measurement challenge

Biodiversity cannot be represented by land area alone. Two parcels of equal size may have very different ecological condition, species value and restoration potential. A credible framework therefore needs a common inventory boundary, a reference state, repeatable ecological criteria and a metric that can combine area with condition without obscuring positive and negative components.

The initiative also had to work across diverse operational settings and ecosystems, including forests, mangroves, wetlands and grasslands. This required a standard evaluation matrix that could support comparison while retaining site-level ecological detail.

Baseline
Establish a defensible starting position

Accountability
Keep positive and negative footprints visible

Comparability
Use consistent criteria across sites and habitats

Decision Use
Translate scores into prioritised management action

A five-step biodiversity quantification framework

The implementation pathway begins with screening and boundary-setting, then moves through ecological evaluation and baseline assessment to accounting and management integration. Each step supplies information needed by the next, creating a traceable line from site selection to action planning.

Prioritise
Screen sites and classify biodiversity importance

Evaluate
Apply ecosystem-specific condition criteria

Baseline
Assess habitats and identify a reference

Quantify
Calculate positive and negative footprints

Integrate
Use results in action and annual projection

Prioritising sites and defining the biodiversity impact inventory

Integrated steel plants and mining locations were initially considered because of their potential biodiversity interactions. Third-party consultants conducted a GIS-based proximity analysis, aligned with the approach adopted from the Taskforce on Nature-related Financial Disclosures, to identify operations within a 10-kilometre aerial radius of Protected Areas and Key Biodiversity Areas. Spatial datasets included globally sourced Key Biodiversity Area boundaries.

The screening identified the Vijayanagar, Dolvi and Salem integrated steel plants, the Vasind cold-rolling mill and 13 iron ore mines, comprising nine mines in Karnataka and four in Odisha, as priority locations. The first phase commenced at Vijayanagar Works.

Organisational and value-chain boundaries were then defined to determine the components included in the Biodiversity Impact Inventory.

Establishing a standard ecological-condition framework

A biodiversity assessment matrix was developed to classify ecosystem types and evaluate ecological condition. For each land parcel, predefined ecological attributes are assessed and assigned a score from 1 to 5. The scoring framework creates a common basis for comparing habitats while identifying the particular attributes requiring management attention.

1 Lower condition	2 Degraded	3 Intermediate
4 Good	5 Reference like	

Building the baseline and selecting reference habitat

Field surveys assess ecological conditions within and around operational sites where business activities interact with nature. A reference habitat is identified and evaluated to establish an ecological benchmark. The resulting baseline provides the starting point for biodiversity-footprint calculations, scenario modelling and site-specific action planning.

The reference-and-baseline approach is central to credibility. Without a transparent starting position and consistent ecological criteria, subsequent improvements cannot be distinguished from changes in survey coverage, assumptions or land area.

Quantifying biodiversity in hectare equivalents

Historic ecosystem and species losses are assessed using the double-entry bookkeeping approach introduced under the Biological Diversity Protocol.

The method calculates a Positive Biodiversity Footprint and a Negative Biodiversity Footprint, which informs the Statement of Biodiversity Position and Statement of Biodiversity Performance.

The assessment considers four accounting events: a hypothetical pristine reference state; degradation associated with industrialisation; current ecological condition; and projected condition after five and ten years of implementing biodiversity-enhancement measures. Biodiversity value is expressed in hectare equivalents, or ha. eq, which combine the spatial extent of each land parcel with its condition relative to an ideal ecological baseline.

Habitat Area
Spatial extent of the land parcel

Condition
Ecological value relative to the reference

Habitat area x Condition = ha. eq
Comparable biodiversity value for accounting

From biodiversity position to management decisions

The current biodiversity position provides a baseline against which future change can be assessed. A lower score against a particular ecological criterion helps identify where action may be required. Site-level measures are then developed through the mitigation hierarchy, and the potential positive contribution of each measure is quantified to project annual progress towards the 2030 ambition.

Current biodiversity footprint

The summary of our current biodiversity footprint (-4,899 ha.eq) is as follows:

1,932 ha.eq
Positive biodiversity Footprint

6,831 ha.eq
Negative biodiversity Footprint

8,763 ha.
Total biodiversity Footprint

Integrating results into decision-making

The condition scores and footprint calculations support identification of targeted action plans. Measures are developed in line with the mitigation hierarchy: avoid impacts where possible, minimise remaining pressures, restore affected habitats and consider offsets only where appropriate after earlier hierarchy steps. Potential gains are quantified and incorporated into annual projections towards No Net Loss.

Identify
Locate ecological attributes requiring improvement

Prioritise
Focus action where condition and risk warrant attention.

Design
Develop measures through the mitigation hierarchy

Model
Estimate potential gains from proposed interventions

Track
Monitor positive and negative footprint components

Linkages with GBF and India's NBSAP

Restoration
Identify degraded habitats and quantify potential gains from restoration measures

Invasive Species
Condition assessments can identify invasive-species pressures and related action

Ecological Resilience
Habitat-condition scenarios can inform measures supporting resilience

Business Action
Assess, manage and report biodiversity-related impacts, risks and performance

Enterprise-wide Sustainability Framework

Climate Change	Energy	Resources	Water Resources	Waste	Waste Water
Air Emissions	Biodiversity	Local Considerations	Human Rights	Indigenous People	Cultural Heritage
Business Ethics	Employee Well-being	Supply Chain Sustainability	Sustainable Mining	Social Sustainability	

At JSW Steel, biodiversity is embedded within our Sustainability Framework and enterprise risk management, reflecting its importance to resilient operations, responsible resource management and long-term value creation. Guided by our double-materiality assessment, we have committed to achieving No Net Loss of biodiversity by 2030. Our science-based quantification framework translates biodiversity performance into measurable metrics, supporting credible progress tracking, operational planning, investment decisions and transparent sustainability reporting.

Prabodha Acharya, Chief Sustainability Officer, JSW Group

No net loss requires more than a commitment; it requires a traceable account.

By combining ecological condition, spatial extent and decision-useful accounting, JSW Steel has established baseline for prioritising action and tracking biodiversity performance over time.





Renewing Ecosystems, Restoring Value

ReNew's Nature Action Plan

ReNew's PAN-INDIA OPERATIONS

ReNew Energy Global PLC has developed a Nature Action Plan to integrate biodiversity into governance, strategy, risk management and operational decision-making across its pan India operations- solar, wind, hydro, storage and manufacturing portfolio.

150+
assets screened

27
priority assets

10 km
ecological buffer

INR 170 million
biodiversity investment

The nature-related challenge

As a leading renewable energy company, ReNew recognizes that scaling clean energy must go hand in hand with protecting and strengthening the natural systems on which businesses, communities and economies depend. Recognizing its interdependence with healthy and resilient ecosystems, ReNew has identified biodiversity as a key material priority. Through a comprehensive assessment of nature-related dependencies, impacts and risks, ReNew is now translating this commitment into focused action across responsible land and water use, habitat protection, avifaunal conservation, invasive species management and ecosystem resilience.



Purple Sunbird at ReNew's wind site in Salkha, Rajasthan



Nilgai/ Blue Bull at ReNew's solar site in Pokhran, Rajasthan



Operational requirements and ecological co-existence is ensured at every site

Taskforce on Nature-related Financial Disclosures (TNFD)-Aligned Assessment: From Screening to Action

- First TNFD-aligned assessment undertaken in FY 2024–25 using the LEAP framework: Locate, Evaluate, Assess and Prepare
- Spatial screening applied a 10-kilometre ecological buffer around operational sites to examine protected areas, wetlands, forests and habitats supporting species of conservation concern
- More than 150 assets were screened; 27 priority biodiversity-sensitive assets were identified for focused assessment and management
- Biodiversity baseline studies informed Biodiversity Management Plans and a No Net Loss Action Plan
- Nature-related risks and opportunities were integrated into Enterprise Risk Management (ERM) with oversight through the Board-level ESG Committee, Sustainability Steering Committee, and a functional Sustainability Working Group guided by our Biodiversity Policy

Nature action plan

100% of ReNew's operational sites are covered by Biodiversity Impact Assessment



The plan combines nature-related risk management, biodiversity conservation, ecosystem restoration, species protection, stakeholder engagement and nature-positive operational practices.

Action on the ground

Ecosystem restoration and landscape conservation

ReNew planted 91,000+ native trees during FY 2024–25 and FY 2025–26 across more than 80 hectares under biodiversity enhancement programmes. Agroforestry, native plantations, nursery development, grassland enhancement and restoration of traditional water bodies were used to support habitat improvement, groundwater recharge, soil conservation, carbon sequestration and ecological resilience. Implementation of the Nature Action Plan continues through a phased biodiversity roadmap focused on moving from biodiversity protection towards restoration, regeneration and transformation.

Species protection

A Mahseer hatchery and fish-ranching programme in Uttarakhand released 112,000 endangered Mahseer fingerlings through twelve ranching events. The programme supports aquatic biodiversity in riverine habitats.

For avian risk management around wind and transmission infrastructure, ReNew invested INR 90 million in FY 2024–25 and FY 2025–26 and installed more than 39,000 bird diverters. Measures also included turbine blade-tip painting, bird guards, conductor insulation, wildlife signage, operational controls during peak bird activity, and bird, bat and nest monitoring incorporated into site-level plans.

91,000 Native trees planted	**80+ ha** Land restored
112,000 Mahseer fish released	**39,000+** Bird diverters installed
INR ~90 million Avain conservation investment	**12** Fish-ranching events

Water stewardship

Robotic dry-cleaning at solar assets, rainwater harvesting, water recycling, watershed work and waterbody restoration conserved more than 1.16 million m^3 of water in FY 2024–25 and FY 2025–26.

~1.16 milliom m^3 Water conserved	**116,800 m^3** of rainwater harvested
2 sites Certified water positive	**INR 11 million** Invested in water initiatives

Stakeholder engagement and shared responsibility

Local communities, conservation experts, institutions and biodiversity partners contribute to identifying ecological priorities and implementing restoration measures. Community outreach, grievance-redressal mechanisms, employee awareness programmes and stakeholder consultations support shared responsibility for nature stewardship.

Commitments and 2030 focus areas

- Apply the mitigation hierarchy: avoid, minimise, restore and offset
- Pursue No Net Loss (NNL) of biodiversity and, where possible, Net Positive Impact (NPI)
- Achieve Water-positive operations and Zero Solid Waste to Landfill by 2030
- Scale No Net Loss measures across priority sites and expand ecological baseline assessments
- Operationalise Key Performance Indicator (KPI) based biodiversity monitoring and enhance TNFD- and International Financial Reporting Standards (IFRS) aligned disclosures

Governance, partnerships and implementation

The initiative is anchored in ReNew's Biodiversity Policy and aligned with the Global Biodiversity Framework (GBF), India's National Biodiversity Strategy and Action Plan (NBSAP) and the India Business & Biodiversity Initiative (IBBI). Implementation draws on engagement with the CII-ITC Centre of Excellence for Sustainable Development, IBBI, Government biodiversity and environmental information platforms, local communities, ecological experts, biodiversity consultants, academic and research institutions, and TNFD knowledge partners.



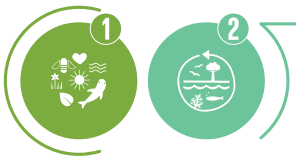
Red-wattled Lapwing at ReNew's solar site in Salkha, Rajasthan



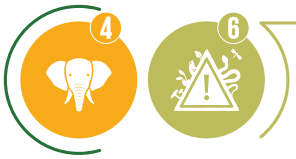
ReNew employees participating in Mahseer fish ranching at the hydro site in Uttarakhand

Linkages with GBF and India's NBSAP

The Nature Action Plan contributes to multiple GBF/NBSAP priorities through site screening, restoration, species protection, private finance, scientific assessment and public disclosure



150+ assets screened, 27 priority sites identified, Biodiversity Management Plans (BMPs) developed, and restoration undertaken through native planting, grassland enhancement and waterbody interventions across 80+ hectares



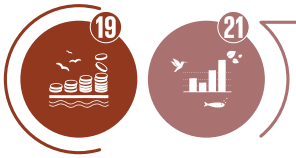
112,000 endangered Mahseer released; avian mitigation and monitoring implemented; invasive-species risks addressed through site-level biodiversity management plans



Renewable energy, water stewardship and restoration measures support climate mitigation, water security, soil conservation and ecosystem resilience



TNFD-aligned LEAP assessment, biodiversity policy, risk integration and public reporting strengthen corporate assessment and disclosure



INR 170 million invested in biodiversity protection; scientific tools, baselines and monitoring strengthen data, capability and transparency with public disclosure of Nature Action Report and Annual Integrated Reporting.



Community engagement, consultations, grievance mechanisms and awareness programmes support inclusive participation

> ***A climate-positive future cannot be achieved without a nature-positive future. TNFD-aligned Nature Action Report marks a significant milestone in embedding biodiversity and ecosystem resilience into the way we plan, build, and operate our business. Through a science-based assessment of nature-related risks and opportunities, we have developed a robust Nature Action Plan that strengthens governance, improves transparency, and drives meaningful on-ground conservation outcomes. As we continue powering India's clean energy transition, we remain committed to ensuring that our growth contributes not only to decarbonisation but also to the protection and restoration of the ecosystems that support communities, livelihoods, and long-term sustainable development.***
>
> *Vaishali Nigam Sinha, Co-Founder & Chairperson – Sustainability, ReNew Energy Global PLC*

From Nature Risk to Nature-Positive Resilience

Through the Nature Action Plan, ReNew embedded biodiversity considerations into operational decision-making, strengthening ecosystem resilience and advancing progress towards No Net Loss and nature-positive growth.

Gaja Sanrakshana

Protecting elephants through safer power networks and community-led coexistence

TATA POWER ODISHA DISTRIBUTION UTILITIES - ODISHA, INDIA

20	8	2,731	75	3,827
forest ranges	districts	threat locations mapped	early-warning sensors	Gaja Saathis

Gaja Sanrakshana (Elephant Protection) is a joint initiative of Tata Power's four Odisha distribution utilities, the Tata Power Community Development Trust and the Odisha Forest Department. The programme seeks to prevent electrocution-related mortality of the Endangered Asian Elephant (Elephas maximus) and strengthen human-elephant coexistence across forest-fringe communities.

The initiative began with a baseline study in 2022 in the conflict hotspots of Angul and Dhenkanal. Following approval to project in forest regions in July 2024, Phase I covered three ranges in the two districts. Phase II, initiated in 2026, extends the programme to 20 forest ranges across eight districts.

Restoration Objective

Reduce infrastructure-linked elephant mortality within the utilities' operation regions while enabling community-led early warning, safer elephant movement and locally managed coexistence.



Why the case matters

- Odisha is home to over 2,100 elephants, as recorded in the all Odisha Elephant Census 2024 conducted by the Forest, Environment and Climate Change Department, Government of Odisha
- Electricity distribution infrastructure overlaps sensitive elephant landscapes
- Illegal power hooking, sagging conductors, open transformers and hazardous fencing can create electrocution risks that are easily preventable
- The same overlap also drives crop depredation, livelihood disruption and human–elephant conflict, underscoring the need for peaceful coexistence

The nature-related challenge

A socio-economic baseline covering 250 vulnerable villages in Angul and Dhenkanal examined patterns of forest use, crop loss and exposure to human-elephant conflict. The findings helped the programme connect wildlife risk with household safety and livelihood resilience.

85.03%
Reported crop raids occurred at night

86.76%
of reported crop loss related to paddy

76.43%
Cultivated land faced partial or complete depredation

4,882 acres
Reported as fallow for over a decade owing to repeated elephant raids

A double-materiality issue

- Elephant mortality and conflict are conservation and community concerns. For a distribution utility, the same risks also relate to energy theft, asset damage, outages and operational safety

From risk mapping to early action

A field-to-community system combining infrastructure correction, technology, local institutions and species monitoring

Map
Threat locations

Correct
Network hazards

Alert
Communities

Respond
Local teams

Monitor
Individual elephants

Risk identification and corrective action

Joint field inspections and night patrolling were carried out by Forest Department personnel, Tata Power teams and Support for Network and Extension Help Agency (SNEHA) field staff to identify live-wire poaching points, sagging lines, open transformers and hazardous fencing. During FY 2025-26, 2,731 electrocution-prone locations were geo-mapped and referred for corrective action, closure and continuing monitoring.

Angul and Dhenkanal	1670 locations (61%)
Sambalpur and Rairakhol	376 locations (14%)
Keonjhar	363 locations (13%)
Other divisions	322 locations (12%)

Technology-enabled early warning

Seventy-five proximity sensors with hooters operate in high-conflict villages. When elephant movement is detected, the system sounds a local siren and sends calls and messages to registered farmers enabling timely response and reducing the risk of human–elephant conflict and associated incidents. The mobile application also supports geo-tagged sightings and mapping of waterbodies, crop-storage points and fencing assets.

75
sensor locations

8,340
registered farmers

1,500+
alerts since inception

Community institutions

The programme works through 3,827 Gaja Saathis, or village volunteers, who disseminate warnings, discourage hazardous practices and support safe elephant movement. A further 720 Rapid Response Team (RRT) members have received classroom and field-based training. More than 2,105 Sarpanchs (village heads), VSS members and district officials have been engaged in participatory conservation and local governance.

3,827	720	2,105
Gaja Saathis	RRT members	Local representatives

Communication rooted in local context

Community outreach uses Pala and Ghoda Nacha folk forms, wall paintings, mobile announcements, animated films and school activities. The programme reports 555 street plays, 172 wall paintings and a seasonal awareness campaign across 153 villages. Training resources include an elephant-tracking booklet approved by the state wildlife authority and an Odia adaptation of selected sections from the MoEFCC–WWF Field Manual for Managing Human–Elephant Conflicts.



Human–elephant coexistence awareness through traditional Ghoda Nacha folk performance

Coexistence through partnership and local resilience

Connecting conservation action with safer practices, livelihood adaptation, governance and transparent reporting

Livelihood resilience

The programme uses existing government schemes rather than establishing parallel delivery systems. Under the National Horticulture Mission, turmeric (haldi) was piloted in Dhenkanal in May 2025 as an elephant-unpalatable alternative crop. The produce was launched as “Gaja Haldi” in June 2026, while quality testing, certification and market linkages remain under development.

More than 2,000 cattle in fringe villages have also been vaccinated. The intervention is intended to reduce disease-transmission risks between domestic livestock and wild elephants while supporting household resilience.

Crop	Health	Market
Gaja Haldi	**2,000+ cattle**	**Next stage**
Alternative-crop pilot	Vaccination coverage	Testing and linkages



Launch of Gaja Haldi – promoting turmeric cultivation as an elephant-friendly livelihood alternative

Governance and financing

The Tata Power Community Development Trust funds and governs the CSR programme, with a stated multi-year commitment of ₹5.3 crore for community interventions and early-warning systems. Programme oversight is described through the Trust’s Board and Tata Power’s CSR and Sustainability Board Committee.

The Government of Odisha’s separate infrastructure allocation is reported in the submission as more than ₹740 crore for preventive and corrective electrical works in elephant corridors and forest zones.

Performance is reported through Tata Power’s Integrated Annual Report and Business Responsibility and Sustainability Report (BRSR), providing a route for disclosure of nature-related actions and risks.

Recognition and award

The project has been recognized with the Chief Minister's Award for Wildlife Conservation 2025 for work delivered in the hotspot areas in Hindol region of Odisha.

Partnership architecture

Partner	Activities
Odisha Forest Department	Joint patrolling, technical guidance, local coordination and action on mapped threats
Tata Power Odisha DISCOMs	Preventive and corrective action on electricity-network risks
Support for Network and Extension Help Agency	Baseline assessment, mobilisation, capacity building and field operations
Communities and local institutions	Early warnings, volunteer response and local governance
Department of Horticulture	Crop diversification support and potential market linkage

Linkages with GBF and India's NBSAP



Developed in partnership with the Government of Odisha, the Gaja Sanrakshana programme seeks to reduce elephant mortality from electrocution and promote peaceful human-elephant co-existence through science-based interventions and community-led conservation. We believe businesses can create significant impact through responsible corporate citizenship by working alongside governments, experts, and local communities to protect critical ecosystems and foster sustainable coexistence. Gaja Sanrakshana embodies our vision of a resilient future where people and wildlife coexist harmoniously and interact sustainably.

- Dr. Praveer Sinha, Chairman, IBBI and CEO & MD, Tata Power Company Ltd

Chapter-4

The Road Ahead for 2030

CBD COP17 in Yerevan, Armenia, marks the first global review of progress under the Kunming-Montreal Global Biodiversity Framework (GBF). It presents a critical opportunity to shift the global biodiversity agenda from high-level commitments to direct implementation. As nations evaluate gaps in achieving the 2030 mission to halt and reverse nature loss, focus must turn to creating the enabling conditions required to scale action, mobilise finance, build multi-stakeholder partnerships, and deliver measurable outcomes.

The case studies in this publication, alongside initiatives led by members of the India Business & Biodiversity Initiative (IBBI), demonstrate that Indian industry is already driving nature-positive outcomes. Businesses are actively advancing nature-related risk assessments, ecosystem restoration, species conservation, wetland management, sustainable supply chains, Nature-based Solutions (NbS), and community partnerships. These practical experiences offer valuable operational insights to accelerate momentum through 2030.

Building on these learnings, the following ten priority areas outline where businesses, governments, financial institutions, and civil society must collaborate to accelerate the GBF and India's updated National Biodiversity Strategy and Action Plan (NBSAP 2024–2030).

Key Priorities for Business & Policy Implementation

Mainstream Biodiversity into Economic Decision-Making

To reverse nature loss by 2030, biodiversity must be integrated into national economic planning, infrastructure, agriculture, manufacturing, finance, and trade policies. Businesses should embed nature considerations directly into corporate governance, capital allocation, procurement, and risk management strategies.

Move from Assessment to Action

The next phase of implementation must translate biodiversity risk and impact assessments into concrete action plans and measurable outcomes. Organizations should prioritize mitigating footprint risks, restoring degraded ecosystems, improving resource efficiency, and embedding nature considerations across capital projects.

Strengthen Access and Benefit Sharing (ABS) Mechanisms

Implementing ABS frameworks, the Nagoya Protocol, and the Cali Fund should foster policy predictability, operational transparency, and equitable benefits for local communities and custodians of biodiversity. Well-functioning ABS systems such as those operating in India support conservation, spur bio-based innovation, and ensure sustainable resource utilization.

Focus on Biodiversity Performance Over Reporting Burden

Disclosure frameworks such as TNFD, BRSR, GRI and ISSB have established an important foundation for transparency and accountability. Greater interoperability and harmonisation among these frameworks can reduce duplication and enable businesses to direct more attention and resources towards implementation. A streamlined reporting environment can support a stronger focus on measurable, ground-level biodiversity outcomes measuring ecosystem recovery, species protection, sustainable sourcing and community impacts.

Create Economic Incentives for Nature-Positive Business Models

To make nature-positive investments commercially viable, policy frameworks must align market signals with conservation. Reforming nature-negative subsidies, creating fiscal incentives for sustainable production, and formally recognizing businesses that deliver verified nature outcomes will be vital for scaling private sector involvement.

Scale Ecosystem Restoration and Nature-Based Solutions (NbS)

Businesses are increasingly implementing landscape-level conservation and Nature-based Solutions through wetland and watershed management, mangrove restoration and other place-based initiatives. Enabling policies, financing mechanisms and institutional platforms can help expand these efforts by facilitating multi-stakeholder partnerships among businesses, government agencies, communities, civil society and scientific institutions. Such collaboration can contribute to biodiversity recovery, climate resilience, water security and rural livelihoods, while strengthening the long-term resilience of business operations and value chains.

Scale Finance for Nature-Positive Outcomes

Achieving 2030 goals requires blending public and private capital for ecosystem restoration and biodiversity conservation. Accelerating blended finance models, innovative market mechanisms (such as green bonds and bio-credits), and bankable nature-positive project pipelines is essential to bridge the nature financing gap.

Enable MSMEs and Supply Chains to Participate

MSMEs and supply-chain partners form an important part of the transition towards nature-positive business practices. Supportive policies, accessible assessment tools, shared biodiversity data, technical assistance and finances can reduce participation barriers and enable enterprises of different sizes to contribute to the implementation of India's biodiversity targets.

Accelerate Innovation and Technology Deployment

Advanced technology significantly improves spatial planning, monitoring, and verification. Deploying geospatial intelligence, remote sensing, AI analytics, environmental DNA (eDNA), and data platforms will allow businesses and policymakers to map nature-related risks accurately and measure restoration efforts.

Strengthen Public-Private Partnerships for Implementation

Reversing nature loss requires structured collaboration among governments, industry, financial institutions, research entities, Indigenous Peoples, and local communities. Collaborative alliances help pool resources, scale proven models, and achieve landscape-level impact.

Road Ahead: Towards 2030

The next phase of biodiversity action must focus on outcomes rather than obligations. While assessments and disclosures remain important tools for managing exposure, the true measure of success lies in healthier ecosystems, species recovery, restored degraded lands, sustainable supply chains, enhanced community livelihoods, and increased capital flow into nature.

For Indian industry, the path to 2030 is not about additional reporting layers, but about building an enabling operational environment. This requires policy alignment, accessible biodiversity finance, practical implementation frameworks for Target 15, streamlined ABS mechanisms, and formal recognition of business contributions toward national targets.

Indian businesses advocate for a clear shift: from commitments to implementation, from reporting to performance, and from compliance to collaboration. Equipped with supportive policy framework, innovative financing, and multi-stakeholder partnerships, industry can actively drive India's NBSAP 2024–2030 targets and contribute meaningfully to the global vision of living in harmony with nature by 2050.

Confederation of Indian Industry

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering Industry, Government and civil society through advisory and consultative processes.

For more than 130 years, CII has been engaged in shaping India's development journey and works proactively on transforming Indian Industry's engagement in national development. With its extensive network across the country and the world, CII serves as a reference point for Indian industry and the international business community.

In the journey of India's economic resurgence, CII facilitates the multifaceted contributions of the Indian Industry, charting a path towards a prosperous and sustainable future. With this backdrop, CII has identified "Accelerating Competitiveness: Growth, Resilience, Inclusion, Sustainability, Trust" as its theme for 2026-27, prioritising five key pillars. During the year, CII will align its policy advocacy, institutional initiatives, partnerships, and outreach to support Indian industry in strengthening these five interconnected pillars of competitiveness.

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CII-ITC Centre of Excellence for Sustainable Development

The CII-ITC Centre of Excellence for Sustainable Development (CESD) is the ecosystem creator for sustainable development in India. As a 20-year-old Industry-led institution within CII, the Centre drives sustainable, environmental, inclusive and climate-friendly transformation among stakeholders through research, data-driven digital tools, frameworks, collaborative initiatives and capacity development.

CESD works towards bringing local and global macro challenges to the centre stage; building policy consensus on critical issues; strengthening stakeholders' awareness and representation on policy & regulatory reforms and enabling actions that positively impact the environment, nature and communities.

With a vision to drive transformation towards sustainable development, CESD continues to play a focal role in Government-Industry dialogues on national regulations; articulating stakeholders' discourse on global policies; putting forth Indian Industry's stand on macro-economic issues and accentuating the need for sustainable and inclusive transformation.

CESD focuses on six transformational pathways: Advancing Creation of a Circular Economy; Facilitating an Enabling Ecosystem for ESG Reporting; Accelerating Nature Positive Actions; Enhancing Solutions for Clean Air; Building Climate Resilience and Low-Carbon Economy and Fostering Dialogues, Engagements & Knowledge Exchange.

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