



International Day for Biodiversity 22nd May, 2025



IDB Celebration Booklet



INTERNATIONAL DAY
FOR BIODIVERSITY 2025

Harmony with nature and sustainable development

हरियाणा राज्य जैव विविधता बोर्ड, पंचकूला
Haryana State Biodiversity Board, Panchkula



INTERNATIONAL BIODIVERSITY DAY CELEBRATION BOOKLET

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Haryana State Biodiversity Board
(An Autonomous Statutory Body Constituted under
Biological Diversity Act, 2002)



CONTENTS

Message from Hon'ble Chief Minister, Haryana	01
Message from Chairman, HSBB	02
Message from Member Secretary, HSBB	03
National level IBD Celebration in Udaipur, Rajasthan	05-07
District level IDB Celebration	08-30
Celebration of World Environment Day 2025	31-38
List of winners of State Level Competitions	39-41
Writeup from subject matter experts	42-65





Message from the Chief Minister, Haryana

संदेश

जैव विविधता न केवल हमारे प्राकृतिक संसाधनों की संपन्नता का प्रतीक है, बल्कि यह मानव जीवन के अस्तित्व और सतत विकास का आधार भी है। वन निकाय, कृषि भूमि और पर्वतीय क्षेत्रों में पाई जाने वाली विविध प्रजातियाँ पृथ्वी पर जीवन को संतुलित बनाए रखने में महत्वपूर्ण भूमिका निभाती हैं। इस वर्ष अंतर्राष्ट्रीय जैव विविधता दिवस का विषय "प्रकृति के साथ सामंजस्य और सतत विकास" इस बात पर बल देता है कि आधुनिक विकास की होड़ में प्रकृति के साथ संतुलन बनाना अत्यंत आवश्यक है।

जैव विविधता की हानि और प्रजातियों के विलुप्त होने की गंभीर समस्या को संबोधित करने के लिए, 1992 में ब्राजील के रियो डी जेनेरियो में एक पृथ्वी शिखर सम्मेलन आयोजित किया गया था जिसमें "जैव विविधता पर कन्वेंशन" नामक एक बहुपक्षीय संधि पर हस्ताक्षर किए गए। भारत सहित 194 देशों ने इस संधि पर हस्ताक्षर किए। भारतीय संसद द्वारा जैव विविधता अधिनियम, 2002 पारित किया गया, जो 5 फरवरी, 2003 से लागू हुआ।

हरियाणा राज्य जैव विविधता बोर्ड का लक्ष्य जैविक विविधता अधिनियम, 2002 के उद्देश्यों को प्राप्त करना, अर्थात् जैविक विविधता का संरक्षण, जैविक संसाधनों का सतत उपयोग और आनुवंशिक संसाधनों के उपयोग से उत्पन्न लाभों का उचित और न्यायसंगत बंटवारा है।

इस वर्ष का अंतर्राष्ट्रीय जैव विविधता दिवस कुनमिंग-मॉन्ट्रियल वैश्विक जैव विविधता रूपरेखा और सतत विकास लक्ष्यों पर परस्पर संबंध को उजागर करने पर केंद्रित है। कुनमिंग-मॉन्ट्रियल वैश्विक जैव विविधता रूपरेखा एक ऐतिहासिक समझौता है जिसे दिसंबर, 2022 में जैव विविधता पर संयुक्त राष्ट्र सम्मेलन के 15वें कॉन्फ्रेंस ऑफ पार्टिज में अपनाया गया था। यह 2030 तक जैव विविधता हानि को रोकने और संरक्षण हेतु एक वैश्विक रोडमैप निर्धारित करता है।

प्रदेश में जैव विविधता के प्रति जन-जागरूकता को बढ़ाने के लिए विभिन्न विश्वविद्यालयों, उच्च शैक्षणिक संस्थानों व स्कूलों के सहयोग से शैक्षणिक कार्यक्रमों व कार्यशालाओं का आयोजन किया जा रहा है। ये गतिविधियां न केवल छात्रों को पर्यावरण संरक्षण के प्रति प्रेरित करती हैं, बल्कि सतत विकास के मूल्यों को भी भीतर स्थापित करती हैं।

मैं, सभी नागरिकों से अपील करता हूँ कि वे प्रकृति के साथ सौहार्दपूर्ण संबंध बनाए रखें, जैव विविधता के संरक्षण में भागीदार बनें और सतत विकास के मार्ग को अपनाएं।

मैं, इस अवसर पर हरियाणावासियों को अंतर्राष्ट्रीय जैव विविधता दिवस की हार्दिक शुभकामनाएं देता हूँ।

नायब सिंह सैनी



Message from the Chairman

Message

On this International Day for Biological Diversity, we reaffirm our commitment to protecting and conserving the rich biodiversity of Haryana and contributing meaningfully to global sustainability efforts.

The theme this year – “Harmony with Nature and Sustainable Living”-reminds us of the deep interdependence between human well-being and the natural world. From forests and wetlands to farmlands and sacred groves, Haryana’s ecosystems support not only countless species but also the livelihoods, traditions, and cultures of our people.

True progress lies in development that respects nature’s limits. Let us embrace practices that preserve our flora and fauna, reduce our ecological footprint, and promote coexistence with all life forms. The Haryana State Biodiversity Board continues to work closely with local communities, institutions, and government bodies to document, conserve, and sustainably manage our biological resources through tools like People’s Biodiversity Registers (PBRs) and Biodiversity Management Committees (BMCs).

On this important day, I call upon citizens, especially the youth, to become stewards of biodiversity. Together, let us move towards a future where our growth and aspirations align harmoniously with the well-being of the planet.

Let us celebrate biodiversity-the foundation of life, the key to our resilience, and the path to a sustainable tomorrow.

Sh. Randeep Singh Jauhar, Chairman
Haryana State Biodiversity Board



Message from Member Secretary

Message

On the occasion of the International Day for Biological Diversity 2025, I extend my heartfelt greetings to all stakeholders, citizens, and biodiversity champions across Haryana.

The theme this year, “Harmony with Nature and Sustainable Living,” serves as a timely reminder of the urgent need to reconnect with the natural world and adopt lifestyles that respect ecological balance. Biodiversity is not only vital for environmental stability but also for food security, health, climate resilience, and sustainable livelihoods.

At the Haryana State Biodiversity Board, we are committed to promoting the conservation and sustainable use of our state’s biological wealth. Through the formulation of People’s Biodiversity Registers (PBRs), strengthening of Biodiversity Management Committees (BMCs), and capacity building at the grassroots level, we strive to integrate biodiversity into development planning and community-led action.

Let us take this opportunity to reaffirm our role as custodians of nature. Every small step-conserving local flora and fauna, reducing waste, supporting traditional ecological knowledge, or spreading awareness-contributes to a more sustainable and harmonious future.

Together, let us work towards building a Haryana where development and biodiversity go hand in hand.

Sh. Atul J. Sirsikar, IFS
Member Secretary, HSBB



MoEFCC Celebrates International Day for Biological Diversity 2025 with an Exhibition on Biodiversity and Bioresources, in Udaipur (Rajasthan)

To mark International Day for Biological Diversity (IDB) 2025, the Union Ministry of Environment, Forest, and Climate Change (MoEFCC), in collaboration with National Biodiversity Authority (NBA), Rajasthan Forest Department and Rajasthan State Biodiversity Board organized a National-level celebration in Udaipur, Rajasthan. The theme for IDB 2025 was 'Harmony with Nature and Sustainable Development'.

During the event, Shri Tanmay Kumar, Secretary (MoEFCC), presided over the launch of a fortnight-long campaign leading up to World Environment Day 2025, themed 'Ending Plastic Pollution'. An exhibition on Biodiversity and Bioresources was inaugurated by Shri Tanmay Kumar, in the presence of Shri C. Achalender Reddy, Chairperson (NBA); Shri Sushil Kumar Awasthi, DG (Forest) and Special Secretary (MoEFCC); Shri Amandeep Garg, Additional Secretary, MoEFCC; and other senior officials from Government of Rajasthan.

Haryana State Biodiversity Board, along with twelve other State Biodiversity Boards, Forest Department of Rajasthan, and various NGOs, exhibited indigenous biodiversity products, medicinal plants, different crop varieties and biodiversity conservation measures for sustainable use. Members of Biodiversity Management Committees (BMCs) from different states displayed their products and interacted with dignitaries. About 350 participants attended the event, including state government officials, serving and retired senior forest officers, representatives from line departments institutions, subject experts, BMC members from Rajasthan, college students, NGOs, and CBOs. The exhibition stall set up by Haryana State Biodiversity Board was appreciated by all dignitaries present.

Speaking on the occasion, Shri Tanmay Kumar recalled the Sixteenth Meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD-COP 16) held in Cali, Colombia, in 2024, and highlighted India's proactive role in advancing the Kunming-Montreal Global Biodiversity Framework (KMGBF). India demonstrated its commitment by submitting updated National Biodiversity Targets in September 2024 and a revised National Biodiversity Strategy and Action Plan on October 30, 2024, during COP 16. Shri Kumar emphasized India's influence in shaping global biodiversity conservation discussions, advocating for simplified and reformed instruments to address the biodiversity finance gap. He also highlighted India's conservation efforts, including expanding wetland protection with 89 Ramsar sites covering 1.35 million hectares and notifying 49 Biodiversity Heritage Sites under Biological Diversity Act, 2002, showcasing ecologically and culturally significant ecosystems.

In his concluding remarks, Shri Tanmay Kumar called for collective action inspired by India's timeless ethos of 'Prakriti Rakshati Rakshita' – Nature protects if she is protected –

and the philosophy of 'Vasudhaiva Kutumbakam' (the world is one family). He highlighted 'Ek Ped Maa Ke Naam' (Plant4Mother) campaign, launched by Prime Minister Shri Narendra Modi on World Environment Day 2024, which has resulted in 142 crore plantations and engaged citizens globally in biodiversity protection. These efforts underscore India's dedication to sustainable development and global biodiversity goals, ensuring the preservation of its rich natural heritage for future generations.

During the event, a video on Other Effective Area-based Conservation Measures (OECM) was screened, and several publications were released. These included India's Updated National Biodiversity Strategy and Action Plan (NBSAP 2024-2030) in English and Hindi, outlining a comprehensive roadmap for biodiversity conservation aligned with global commitments. Additionally, a brochure detailing preparation of India's Seventh National Report (NR7) to the Convention on Biological Diversity (CBD); a prospectus and curriculum for MoEFCC-IICA-NBA-UNDP Certificate Programme in Business & Biodiversity Conservation; a compendium showcasing India's Biodiversity Heritage Sites; and a brochure on Biological Diversity-Access to Biological Resources and Knowledge Associated thereto and Fair and Equitable Sharing of Benefits Regulations, 2025 were unveiled, reinforcing India's commitment to sustainable development and equitable resource sharing.





DISTRICT LEVEL CELEBRATIONS IDB-2025

Government Senior Secondary School, Village Manka (Ambala)

1. No of participants 150
2. Guests Mrs. Anita HFS, Mrs. Manpreet Kaur, School In-charge, Mr. Rajesh Kumar, Professor and Sh. Ram Kumar
3. Activities Painting, Essay Writing, Quiz and Photography competition on conservation of Biodiversity.



Government Senior Secondary School, Lilass (Bhiwani)

1. No of participants 100
2. Guests Chairperson of the Municipality Sh. Rajesh Kedia other members, Principal & School Staff
3. Activities Many activities like Painting Competition on Conservation of Biodiversity, Essay Writing, etc. were organized



Government High School, Khorda (Charkhi Dadri)

1. No of participants 120
2. Guests Youth club, NGO Kisan Seva Samiti, Biodiversity Management Committee members, village people, women and children participated in it
3. Activities Painting competition on Conservation of biodiversity, essay writing, etc.



Government High School, Alipur and Gharora (Faridabad)

1. No of participants 100
2. Guests School Principal and founders, Teachers and Students.
3. Activities Quiz, Speech, Song, Plantation and other activities



Shri Chaitanya Techno School (Fatehabad)

1. No of participants 350
2. Guests Sh. Yashveer Singh, Forest Officer, Smt. Anita Kranti, Social worker, Sh. Omprakash Khichad from New Generation Social Welfare Society, Sh. Amilal, Block Officer Sh. Sunit and Sh. Sahil from TSG-Maaty Sanstha, Sh. Sandeep Kumar, BMC Member, Sh. Vikram Arora, School Principal Smt. Ambika Arora and staff.
3. Activities Speech, Poetry, Drama, Group Dance & Painting competition



Government Middle School, Sultanpur (Gurugram)

1. No of participants 150
2. Guests Sh. Alok Kumar Principal and Staff.
3. Activities Painting, Poster making, Speech and Essay writing Plantation activities.



Government Model Sanskriti Senior Secondary School, Uklana Mandi (Hisar)

1. No of participants 150
2. Guests Mr. Rameshwar Das, Retired, Forest Official, Mr. Deepak Kumar Publicity and Training Range Forest Department and team members, Mr. Mangal Singh, BMC member Mughalpura, Dr. Arjun Dev, School Principal, Mr. Kuldeep Singh, PGT English, Mr. Rajendra Singh, PGT Fine Art and staff members
3. Activities Many activities like painting competition on Conservation of biodiversity, essay writing, etc. were held



DAV Centenary Public School, Urban Estate (Jind)

1. No of participants 200
2. Guests Mrs. Rashmi Vidyarthi, Principal, Sh. Pawan Grover, HFS, DFO Jind, Sh. Vinod Karwasra, HSBB, Sh. Amit Sharma, Range Forest Officer and Dr. Subhash Chandra were present
3. Activities Many activities like speech competition, Plantation painting competition on conservation of biodiversity, essay writing, etc. were organized



Government Senior Secondary School, Teek (Kaithal)

1. No of participants 100
2. Guests Sh. Vikram Tanwar, BMC Chairman, Sarpanch and school staff
3. Biodiversity day Activities Painting, Poster making, Poetry and Rangoli writing Plantation activities.



Government High School, Jamba (Karnal)

1. No of participants 120
2. Guests Mrs. Rajesh Kumari, Principal, Mr. Tejpal, Science teacher, Mr. Jitendra Kumar, Ms. Rekha Parashar, Mrs. Rinki Kumari, Mrs. Rinku Kumari and the entire school staff
3. Activities Painting, Poster making, Poetry and Essay writing
Plantation activities.



Model Sanskriti Government Primary School, Barna (Kurukshetra)

- 1. No of participants 100
- 2. Guests Sh. Satpal, Head Teacher, Mr. Jasbir Singh, Science teacher, Smt. Savitri, Smt. Kusum Kaur, Smt. Anju Devi and the entire school staff
- 3. Activities Painting / Poster Making Competition, Poetry Competition, Speech on Biodiversity Conservation and Plantation activities.



Government Model Sanskriti School (Mahendragarh)

1. No of participants 100
2. Guests Sr. Vijender Singh, IFS, DCF Mahendragarh, Dr. R. N. Yadav, Environmentalist and President Awardee, Mr. Sunil Gora, Principal and Dr. Shiv Bhavna Vice Principal
3. Activities Painting / Poster Making Competition, Poetry Competition, Essay Writing, Singing, Dancing, Speech on Biodiversity Conservation and Plantation activities.



Government School Salahedi (Nuh)

1. No of participants 200
2. Guests Forest officials, Principal and school staff
3. Activities Painting, Poster making, Speech and Plantation activities.



Government Sr. Sec. School, Hurithal (Palwal)

1. No of participants 150
2. Guests Principal and school staff
3. Activities Painting, Poster making, Speech and Plantation activities.



Govt. Sr. Sec. School, Mandhna, Morni hills, (Panchkula)

1. No of participants 100
2. Guests Sh. Sunil Kundu, Range Forest Officer, Principal and school staff
3. Activities Painting / Poster Making Competition, Poetry Competition, Essay Writing, Speech on Biodiversity Conservation & Environment and Plantation activities.



Bhagwan Parshuram Shikshan Mahavidyalaya, Nara (Panipat)

1. No of participants 160
2. Guests Dr. Vijay Laxmi, IFS, CF-Central Circle , Sh. Ravindra Sharma, Principal, Mrs. Sunita Rani, Mrs. Sonia Sharma, Mrs. Akanksha Kaushik, Mrs. Preeti Deshwal, Sh. Narendra Singh, Sh. Krishna Grover, Mrs. Ritu Kharab and Mrs. Pooja Jain (College professors)
3. Activities Painting, Poster making, Poetry and Essay writing Plantation activities.



Govt Senior Secondary School Bikaner (Rewari)

1. No of participants 440
2. Guests Sh. Manoj Kumar Principal and school staff,
Sh. Anshul Yadav Forest Block officer & Sh. Sanjay Forest guard
3. Activities Painting Competition, Poetry Competition, Essay Writing, Speech on Biodiversity Conservation & Environment and Plantation activities.



Government Nursing College, Civil Hospital (Sirsa)

1. No of participants 100
2. Guest Sh. Lakshit Sarin, IAS, ADC, Sirsa, Sh. Mahendra Bhadu, Civil Surgeon, Smt. Vimala Principal, Sh. Haripal Singh, Deputy Ranger.
3. Activities Painting/Rangoli Competition, Poetry Competition, Essay Writing, Speech on Biodiversity Conservation & Environment and Plantation activities.



Shiv Shakti Senior Secondary School, (Sonipat)

- | | |
|-----------------------|---|
| 1. No of participants | 120 |
| 2. Guest | Sh. Naresh Kumar, Range Officer,
Smt. Bhavna, Principal and School Staff. |
| 3. Activities | Painting, Poster making,
Dance, Quiz Competition
Poetry and Essay writing
Plantation activities. |



Government Girls Senior Secondary School, Purani Sabzi Mandi, (Yamuna Nagar)

1. No of participants 100
2. Guest Smt. Sukhpal Kaur, DFO, Sh. Shashi Gupta, Founder, Ek Soch Nayi Soch Sansthan, Smt. Amrit Pal Kaur, Principal, Dr. Anuj Garg, Smt. Seema Arora, Smt. Rukmani and Sh. Ashok Kumar & Forest Official
3. Activities Painting Competition, Speech Competition, Poetry, Essay writing and Plantation activities.



अंतर्राष्ट्रीय जैव विविधता दिवस पर चित्रकला, भाषण प्रतियोगिता आयोजित



छात्रों ने जैव विविधता दिवस पर चित्रकला प्रतियोगिता में भाग लिया।

गुरुग्राम। अंतरराष्ट्रीय जैव विविधता दिवस के उपलक्ष्य में शुक्रवार को राजकीय माध्यमिक विद्यालय ग्राम सुल्तानपुर (ब्लॉक फर्रुखनगर) में एक जागरूकता कार्यक्रम आयोजित किया गया। इसमें विद्यार्थियों के लिए निबंध लेखन, चित्रकला तथा रंगोली प्रतियोगिताएं आयोजित की गईं, जिनमें विद्यार्थियों ने उत्साहपूर्वक भाग लिया। अपनी रचनात्मकता के माध्यम से जैव विविधता संरक्षण का संदेश दिया। प्रतियोगिता में भाग लेने वाले 30 विद्यार्थियों को प्रशस्ति पत्र से सम्मानित किया।

इस अवसर पर राजकीय उच्च विद्यालय आंचा में हरियाणा राज्य जैव विविधता बोर्ड के दिशा-निर्देश में जागरूकता कार्यक्रम का आयोजन किया गया। कार्यक्रम की शुरुआत मुख्याध्यापिका राजेश कुमारी एवं बच्चों द्वारा पौधारोपण करके की गई। मुख्याध्यापिका राजेश कुमारी ने छात्रों को जैव विविधता के महत्व व पर्यावरण संरक्षण के प्रति जागरूक करते हुए अधिक से अधिक पेड़ लगाने का आह्वान किया। विज्ञान अध्यापक तेजपाल ने विद्यार्थियों को पेड़-पौधों की देखभाल और संरक्षण के प्रति प्रेरित किया। इस अवसर पर जैव विविधता

छात्रों ने जैव विविधता संरक्षण का संदेश दिया

गुरुग्राम। अंतरराष्ट्रीय जैव विविधता दिवस के उपलक्ष्य में शुक्रवार को राजकीय माध्यमिक विद्यालय ग्राम सुल्तानपुर (ब्लॉक फर्रुखनगर) में एक जागरूकता कार्यक्रम आयोजित किया गया। इसमें विद्यार्थियों के लिए निबंध लेखन, चित्रकला तथा रंगोली प्रतियोगिताएं आयोजित की गईं, जिनमें विद्यार्थियों ने उत्साहपूर्वक भाग लिया। अपनी रचनात्मकता के माध्यम से जैव विविधता संरक्षण का संदेश दिया। प्रतियोगिता में भाग लेने वाले 30 विद्यार्थियों को प्रशस्ति पत्र से सम्मानित किया।

विद्यालय में अंतर्राष्ट्रीय जैव विविधता दिवस पर जागरूकता कार्यक्रम

निगद, 22 मई (उटीप): अंतर्राष्ट्रीय जैव विविधता दिवस के अवसर पर राजकीय उच्च विद्यालय आंचा में हरियाणा राज्य जैव विविधता बोर्ड के दिशा-निर्देश में जागरूकता कार्यक्रम का आयोजन किया गया। कार्यक्रम की शुरुआत मुख्याध्यापिका राजेश कुमारी एवं बच्चों द्वारा पौधारोपण करके की गई। मुख्याध्यापिका राजेश कुमारी ने छात्रों को जैव विविधता के महत्व व पर्यावरण संरक्षण के प्रति जागरूक करते हुए अधिक से अधिक पेड़ लगाने का आह्वान किया। विज्ञान अध्यापक तेजपाल ने विद्यार्थियों को पेड़-पौधों की देखभाल और संरक्षण के प्रति प्रेरित किया। इस अवसर पर जैव विविधता



कार्यक्रम में मौजूद स्टाफ व बच्चे।

बोर्ड के जिला समन्वयक संदीप कुमार ने बोर्ड की कार्यप्रणाली, उद्देश्यों व जैव विविधता प्रबंधन समिति की भूमिका पर विस्तार से प्रकाश डाला। उन्होंने छात्रों को जैव विविधता पत्रिका की उपयोगिता और संरक्षण की आवश्यकता से अवगत कराया। (सामाजिक विज्ञान

शिक्षक कितेन्द्र कुमार ने विलुप्त होती जीव-जंतु प्रजातियों पर चिन्ता जताई, वहीं अध्यापक कपिल सिंह ने प्रकृति एवं जैव विविधता के संरक्षण पर अपने विचार रखे। कार्यक्रम के दौरान विद्यालय में काव्य लेखन, निबंध लेखन, रंगोली और चित्रकला प्रतियोगिताओं का आयोजन किया गया।

इन प्रतियोगिताओं में उत्कृष्ट प्रदर्शन करने वाले विद्यार्थियों को प्रमाण पत्र व पुरस्कार देकर सम्मानित किया गया। प्रतिभागियों को जैव विविधता संबंधित शैक्षणिक सामग्री भी वितरित की गई। कार्यक्रम में कितेन्द्र कुमार, रेखा पराशर, रिकी कुमारी, रिकू कुमारी आदि मौजूद रहे।

अंतरराष्ट्रीय जैव विविधता दिवस पर जागरूकता कार्यक्रम

गुरुग्राम। अंतरराष्ट्रीय जैव विविधता दिवस के अवसर पर राजकीय उच्च विद्यालय आंचा में हरियाणा राज्य जैव विविधता बोर्ड के दिशा-निर्देश में जागरूकता कार्यक्रम का आयोजन किया गया। कार्यक्रम की शुरुआत मुख्याध्यापिका राजेश कुमारी एवं बच्चों द्वारा पौधारोपण करके की गई। मुख्याध्यापिका राजेश कुमारी ने छात्रों को जैव विविधता के महत्व व पर्यावरण संरक्षण के प्रति जागरूक करते हुए अधिक से अधिक पेड़ लगाने का आह्वान किया। विज्ञान अध्यापक तेजपाल ने विद्यार्थियों को पेड़-पौधों की देखभाल और संरक्षण के प्रति प्रेरित किया। इस अवसर पर जैव विविधता



विज्ञान, निबंध लेखन, रंगोली और चित्रकला प्रतियोगिताओं का आयोजन किया गया। इन प्रतियोगिताओं में उत्कृष्ट प्रदर्शन करने वाले विद्यार्थियों को प्रमाण पत्र व पुरस्कार देकर सम्मानित किया गया। प्रतिभागियों को जैव विविधता संबंधित शैक्षणिक सामग्री भी वितरित की गई। कार्यक्रम में कितेन्द्र कुमार, रेखा पराशर, रिकी कुमारी, रिकू कुमारी आदि मौजूद रहे।

एक पौधा मां के नाम जरूर लगाएं : डीएफओ विजय लक्ष्मी



भगवान परशुराम शिक्षण महाविद्यालय, नारा में डीएफओ विजय लक्ष्मी विद्यार्थियों को प्रशस्ति पत्र देकर सम्मानित करते हुए।

25 विद्यार्थियों को किया प्रशस्ति पत्र देकर सम्मानित

राजेन्द्र जून्ग/मोहन लखन। पानीपत, 22 मई: भगवान परशुराम शिक्षण महाविद्यालय, नारा (पानीपत) में अंतर्राष्ट्रीय जैव विविधता दिवस के अवसर पर जागरूकता कार्यक्रम का आयोजन किया गया। कार्यक्रम में बतौर मुख्य अतिथि डीएफओ विजय लक्ष्मी (आइएफएस) ने भाग लिया। कार्यक्रम की शुरुआत मुख्य अतिथि द्वारा पौधारोपण करके की गई। डीएफओ ने कहा कि हर व्यक्ति को एक पौधा मां के नाम अवश्य लगाना चाहिए। ज्यादा से ज्यादा पौधारोपण करने से पर्यावरण संरक्षण होता है। वह जीवन को गति देने के लिए जरूरी है। कार्यक्रम में स्कुल के 160 विद्यार्थियों ने भाग लिया। कार्यक्रम में जैव विविधता संरक्षण पर निबंध, चित्रकला और

प्रतियोगिता में भाग लेने वाले 25 विद्यार्थियों को मुख्य अतिथि सम्मानित किया गया। डीएफओ विजय लक्ष्मी आइएफएस ने जैव विविधता संरक्षण पर अपने अनुभव सांझा किए और विद्यार्थियों को हमारे जीवन में स्वस्थ पर्यावरण के बंध साध है के बारे में समझाया। शिक्षण रविंद्र शर्मा ने विद्यार्थियों को हमारे जीवन में पेड़-पौधों और जानवरों के महत्व के बारे में बताया। जिला समन्वयक कुलदीप शर्मा, जिला एक्ज़रसिवीवी पानीपा ने जैव विविधता संरक्षण, बीएमसी के गठन के बारे में अपने अनुभव सांझा किए। इस अवसर पर सहायक प्राध्यापिका ज्योति मेहरा, कॉलेज प्रबंधक डॉ दिनेश कुमार गौतम, सुनीता रानी, सोनिया शर्मा, आनंदा कौशिक, प्रीति देशवाल, नरेंद्र सिंह, कृष्णा रोषर, रिनु खरब, पूजा जैन उपस्थित रही।

विश्व जैव विविधता दिवस पर विभिन्न प्रतियोगिताएं हुईं

दैनिक हिन्दुस्तान, 24-5-2025

विश्व जैव विविधता दिवस पर विभिन्न प्रतियोगिताएं हुईं

दिए गए अवसर पर निबंध लेखन, भाषण, रंगोली आदि प्रतियोगिताओं में 90 विद्यार्थियों ने भाग लिया

गुरुग्राम। अंतरराष्ट्रीय जैव विविधता दिवस के अवसर पर राजकीय उच्च विद्यालय आंचा में हरियाणा राज्य जैव विविधता बोर्ड के दिशा-निर्देश में जागरूकता कार्यक्रम का आयोजन किया गया। कार्यक्रम की शुरुआत मुख्याध्यापिका राजेश कुमारी एवं बच्चों द्वारा पौधारोपण करके की गई। मुख्याध्यापिका राजेश कुमारी ने छात्रों को जैव विविधता के महत्व व पर्यावरण संरक्षण के प्रति जागरूक करते हुए अधिक से अधिक पेड़ लगाने का आह्वान किया। विज्ञान अध्यापक तेजपाल ने विद्यार्थियों को पेड़-पौधों की देखभाल और संरक्षण के प्रति प्रेरित किया। इस अवसर पर जैव विविधता

हर व्यक्ति को एक पौधा अपने मां के नाम से लगाना चाहिए: विजय लक्ष्मी

हर एक व्यक्ति को अपने मां के नाम से एक पौधा लगाना चाहिए। यह एक बहुत ही सरल और प्रभावी तरीका है जो हमें अपने माता-पिताओं को याद रखने और उनका सम्मान करने में मदद करता है।



यदि हमें अपने माता-पिताओं के नाम से एक पौधा लगाना है, तो हमें इसे एक विशेष और सज्जद तरीके से करना चाहिए। हम इसे एक अच्छे जगह पर लगाना चाहिए जहाँ यह हमारे माता-पिताओं को याद दिलाएगा।

निबंध और चित्रकला से जैव विविधता का बताया महत्व, 25 विद्यार्थी हुए सम्मानित

नारा गांव स्थित भगवान परशुराम शिक्षण महाविद्यालय में हुआ आयोजन



नारा गांव स्थित भगवान परशुराम शिक्षण महाविद्यालय में आयोजित कार्यक्रम में 25 विद्यार्थी को सम्मानित किया गया। कार्यक्रम में निबंध और चित्रकला से जैव विविधता के महत्व को बताया गया।

कार्यक्रम

पर्यावरण बचाने और जागरूक करने के लिए विद्यार्थी आगे आए



पर्यावरण बचाने और जागरूक करने के लिए विद्यार्थी आगे आए। कार्यक्रम में विद्यार्थियों ने निबंध और चित्रकला से पर्यावरण के महत्व को बताया।

विश्व जैव विविधता दिवस पर कार्यक्रम आयोजित किया



विश्व जैव विविधता दिवस पर कार्यक्रम आयोजित किया। कार्यक्रम में विद्यार्थियों ने निबंध और चित्रकला से जैव विविधता के महत्व को बताया।

प्रतियोगिताओं में विद्यार्थियों ने लिया हिस्सा



प्रतियोगिताओं में विद्यार्थियों ने लिया हिस्सा। कार्यक्रम में विद्यार्थियों ने निबंध और चित्रकला से जैव विविधता के महत्व को बताया।

प्रकृति के साथ सामंजस्य और सतत विकास जरूरी: नरेश कुमार



प्रकृति के साथ सामंजस्य और सतत विकास जरूरी: नरेश कुमार। कार्यक्रम में विद्यार्थियों ने निबंध और चित्रकला से प्रकृति के महत्व को बताया।

शिव शक्ति स्कूल में मनाया जैव विविधता दिवस



शिव शक्ति स्कूल में मनाया जैव विविधता दिवस। कार्यक्रम में विद्यार्थियों ने निबंध और चित्रकला से जैव विविधता के महत्व को बताया।

प्रकृति के साथ सामंजस्य और सतत विकास ही भविष्य का आधार: नरेश कुमार



प्रकृति के साथ सामंजस्य और सतत विकास ही भविष्य का आधार: नरेश कुमार। कार्यक्रम में विद्यार्थियों ने निबंध और चित्रकला से प्रकृति के महत्व को बताया।

जैव विविधता के बिना पृथ्वी पर जीवन संभव नहीं: संजीव कुमार



जैव विविधता के बिना पृथ्वी पर जीवन संभव नहीं: संजीव कुमार। कार्यक्रम में विद्यार्थियों ने निबंध और चित्रकला से जैव विविधता के महत्व को बताया।



**World Environment Day
Celebration
at Charkhi Dadri
on 5th June, 2025**



Plantation by Hon'ble CM Haryana on occasion of World Environment Day, 5th June, 2025

District level Celebration Ek Ped Maa Ke Naam







**PRAN VAYU DEVTA WORSHIP
ON THE OCCASION OF
WORLD ENVIRONMENT DAY
5TH JUNE, 2025**





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LIST OF WINNERS OF COMPETITIONS HELD IN VIRTUAL MODE ON 15.05.2025

International Day for Biological Diversity (IDB) is celebrated every year on 22nd May. This year, IDB was celebrated with great enthusiasm in all districts of Haryana State on 22.05.2025. Essay Writing, Quiz, Painting, and Photography Competitions were conducted online on 15.05.2024. To ensure wide publicity and maximum participation by school students and general public, advertisements were published in leading newspapers, and details of terms and conditions of the competitions were uploaded on the Board's website.

A Committee consisting of Ms. Anita, ACF (H.Q.); Sh. Vinod Kumar; Ms. Priya Rani; Ms. Rajni; and Ms. Sarvesh was constituted vide Order Endst. No. 35 dated 05.05.2025 to evaluate entries and prepare results of all competitions. The winners will be awarded cash prizes and certificates. The Committee evaluated all entries, and competition-wise results are as follows:

1. Names of winners of Quiz Competition: (Class XI & XII)

Sr. No.	Name of Participant	Name of School	Position
1.	Sneha d/o Mr. Anil	The Aryan Sr. Sec. School, V.P.O. Banwasa Gohana, Sonipat	1st
2.	Aditya s/o Sh. Ajay Kumar	Indian Modern Sr. Sec. School, Gohana, Sonipat	2nd
3.	Ankush d/o Mr. Vijay Kumar	Dev Centenary, Public School, Jind	3rd

2. Name of winners of Essay writing competition:

Open Category (English Language)		
Sr. No.	Name of Participant	Position
1.	Bindu d/o Sh. Kharag Singh	1st
2.	Rushil d/o Sh. Rajeev Rathor	2nd
3.	Anju Rani	3rd
Open Category (Hindi Language)		
1.	Vikas Goyal s/o Sh. Subhash Goyal	1st
2.	Satish s/o Sh. Sukhbir Singh	2nd
3.	Sanjay s/o Sh. Rajpal	3rd
School Category (Hindi Language)		
1.	Kushagr s/o Sh. NeeraJ Kumar	1st
School Category (English Language)		
1.	Rishit s/o Sh. Naveen Kumar	1st
2.	Kabeer s/o Sh. Ashok Kumar	2nd

3. Names of Winners of Photography Competition:

Sr. No.	Name of Participant	Position
College/ University Category		
1.	Dheeraj s/o Sh. Mahabir	1st
2.	Yashika	2nd
Rest of Public Category		
1.	Isha w/o Sh. Rohit	1st
2.	Vineet	2nd
3.	Deepak s/o Sh. Budh Ram	3rd

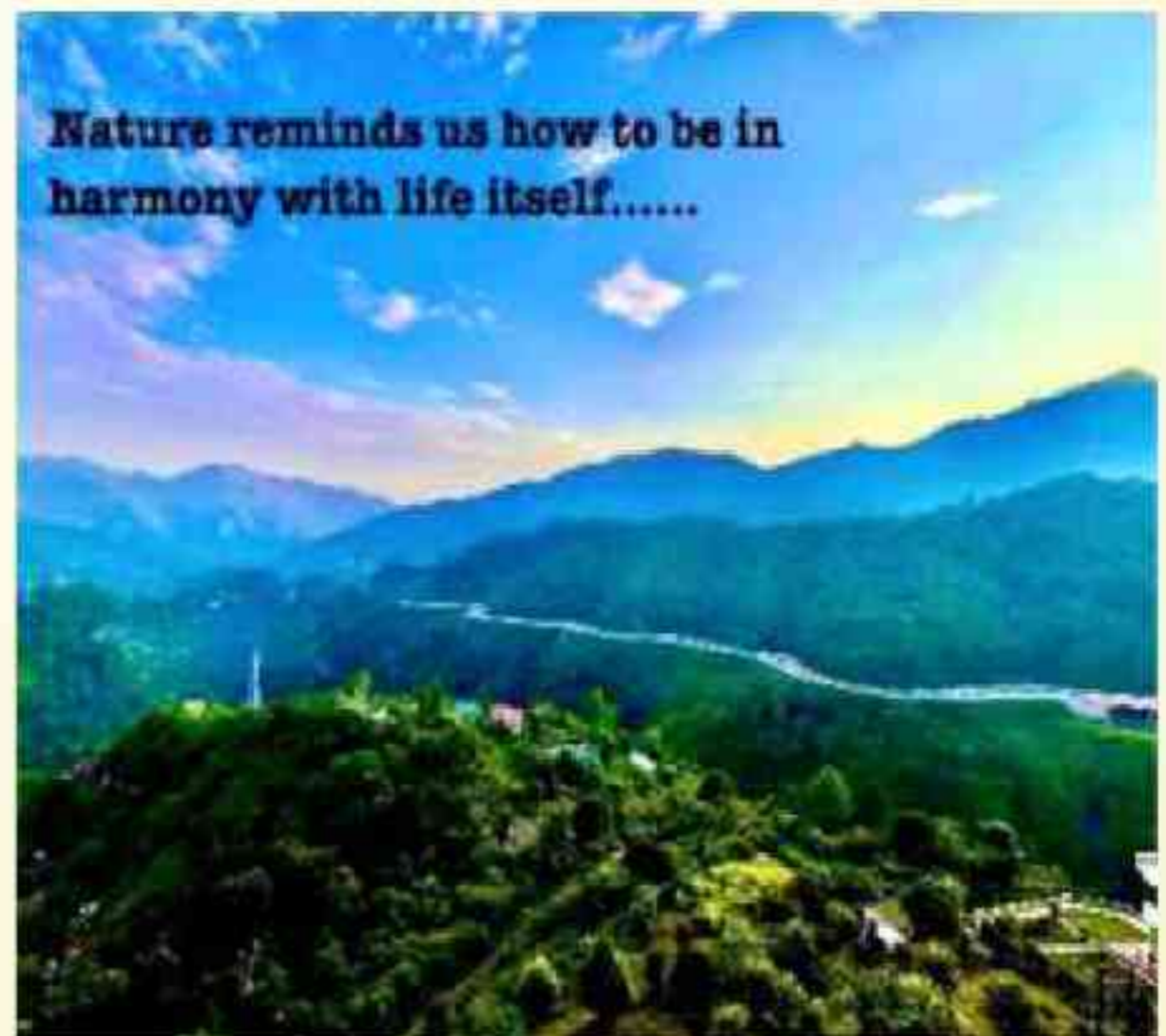
4. Names of Winners of Painting Competition: (Class VIII to XII)

Sr. No.	Name of Participant	Position
1.	Dhairya s/o Sh. Yogesh	1st
2.	Shaurya s/o Sh. Amit Kumar Arya	2nd
3.	Chitrakshi d/o Sh. Suresh Kumar	3rd





Nature never goes out of style ...



Nature reminds us how to be in harmony with life itself.....


" **Harmony with Nature and Sustainable Development** " **WOMEN AND BIODIVERSITY CONSERVATION**

Dr. Amarinder Kaur, IFS (Retd)



Traditionally, women and biodiversity conservation were interwoven, especially in rural areas. The family kitchen which was normally outside the main residential area was a centre place for biodiversity maintenance. The food that was prepared in the kitchen was partially given to birds which flocked around the kitchen. The cats, dogs, and cattle used to get their feed and the natural cycle continued. With the passage of time, changes in lifestyle, preponderance of nuclear families, advancement in technology and modern gadgets this activity was curtailed. Moreover, with largescale construction of buildings, erection of mobile towers, laying of roads, sewage, and other infrastructure etc the delicate symbiotic bond got snapped and gradually the feed for birds and other animals living in the vicinity got disrupted. Apart from this, the nesting places and niches of birds and animals diminished resulting in their depletion of population. Indiscriminate cutting of indigenous tree species further compounded the scenario. Women played a crucial role here 1 in maintaining the biological diversity which was traditionally engrained in their daily house chores. Woman, being a mother has many facets of life akin to mother Nature. Both are creators and nurturers and sustain life on the planet. Women played a pivotal role in not only raising their families but also preserving the biological diversity. With the increase in population there was tremendous pressure on land. Extensive and intensive agriculture diminished the village forests as well as other vacant lands which resulted in diminishing habitat of birds and animals. With the advent of the green revolution, hybrid short rotation crops, increased use of insecticides, pesticides, widespread use of inorganic fertilizers, diminishing use of organic cow dung manure, pumping out groundwater in large quantities etc disturbed the environmental balance and lead to extinction of many friendly insects, birds, mammals etc. Monoculture of cropping pattern has played havoc with biodiversity; the delicate natural food chain has been impacted. Population of rodents has increased whereas that of snakes, frogs etc reduced. Vultures are at the point of extinction. Women, especially the disadvantaged, who used to 2 get fuel wood, fodder etc for their daily requirements faced acute hardship. The situation got compounded further with the introduction and adoption of paddy as a major crop which needed large amounts of water for cultivation and lead to severe lowering of the

water table. Bringing extensive sandy areas under wide spread agriculture resulted in diminishing of local species used in households for food, fodder, and fuelwood. Indiscriminate use of machinery for agricultural activities even at inappropriate sites has led to diminishing of local species like *Caparis aphylla*, commonly known as teet and *Prosopis cineraria* (khejri) to name a few. Although panchayat raj institutions are in place and one third of the representation in these bodies at various levels are earmarked for women, it is the male counterparts who hold sway. At many places although a women was elected as the sarpanch, it was her husband who managed the affairs of the panchayat. Women representation largely was a cosmetic reality and the authority vested in the males. In such a scenario the aspiration of women, as expected, would obviously take a back seat. A case to point out is the preference of tree species to be planted on common lands of 3 villages, while the women desired that multi-use species be planted so that they could obtain fuelwood, fodder, fruit, medicinal raw material for use, the males wanted that short rotation cash generating species be planted. In the end it was the male preferences that dominated the final decision and the women were left in desperation as their priorities were overlooked. However, over the years the scenario has changed, with greater awareness on the role of women in society, governmental outreach to involve women proactively in various programs has helped gradually greater effective participation and influencing decision-making interventions. A lot of water has flown under the bridge since then and in many Governments programmes participation of women is being ensured to make them competent through regular trainings, awareness, and skill development programmes to avail benefit of Government schemes and enhance their income and livelihood opportunities and assist in biodiversity conservation. In order to restore vultures back in the ecosystem, regular workshops and training camps were organised for women. Chemists were made aware of the 4 harmful effects of Diclofenac on vultures and they were requested to discontinue its supply. A study revealed that village women where Self-Help Groups (SHGs) were constituted and performing actively, showed capabilities of effective leadership, adoption of initiatives for improvement in health, education, biodiversity conservation etc. Women, who a few years ago were hesitant to put forth their views in meetings where male members were present, had become more vocal and could not only put across their views but also get their felt- needs implemented. This was not so in the non- SHG villages. A silent awakening, a definite undercurrent is emerging in the villages where women now are becoming more proactive to get their preferences given due weightage. Social media has also played a major role in disseminating information about success stories all over the globe where women were in the forefront for highlighting various issues and concrete action for environmental and biodiversity conservation. At the Government level, the Wildlife Protection Act, Forest Conservation Act, Environment Protection Act etc have given more teeth to society to ensure conservation and 5 rehabilitations. Rallies, exhibitions, workshops,



social media expositions, integrating courses in school curriculum, increased participation of girl students have all contributed in generating awareness about biodiversity conservation. State Biodiversity Boards have been established in states to collect, correlate and document biodiversity prevailing at present and what was prevailing in the villages. Coordination of staff with members of SHGs needs to be done in a greater measure to make them aware about the loss of biodiversity in the area. Action plans need to be prepared village-wise to act as a guide for collective action for restoration of the lost biodiversity. Women, local youth leaders, senior citizens, students need to be involved in the rejuvenation efforts. All forms of life, human, animal, and plant are so closely interlinked that disturbances in one give rise to imbalances in others. A lot needs to be done to conserve biodiversity. We need to protect our land, water, air, and vegetation resources in consonance with nature. Nature is bountiful in its blessings but a merciless Goddess too. Mankind cannot afford to be a victim of its wrath. To live in harmony with nature we have to give back what we have taken from it. We have overexploited 6 its goods and, in the event, deprived ourselves of its services as goods and services are inseparable. To a large extent we have depleted and polluted our soil, water, and air resources. It is high time we collectively rejuvenate and conserve biodiversity for the well-being of mankind. The writing on the wall is clear “perform or perish”

" **Harmony with Nature and Sustainable Development** "

THE ROLE OF YOUTH IN ACHIEVING HARMONY WITH NATURE

Dr. Ashima Gakhar

Principal, Dyal Singh College, Karnal



In an era marked by environmental crises such as climate change, biodiversity loss, and pollution, the role of youth in fostering harmony with nature has become increasingly pivotal. Youth are important in achieving harmony with nature because they bring energy, creativity, moral clarity, and a long-term perspective to the environmental movement. Empowering them means securing not only the future of the planet but also a more just and sustainable society. In recent years, educated, eco-conscious young individuals worldwide are not only advocating for environmental justice but are also actively engaging in initiatives that promote sustainability and ecological balance.

Indian ethos guides us to live in harmony with nature, with simple yet powerful philosophies of "Vasudhaiva Kutumbakam" (the world is one family) and "Sarve Bhavantu Sukhinah" (may all beings be happy) as our guiding principles. In this perspective, it is heartening to delve into the multifaceted contributions of Indian youth in environmental conservation. Youth Action Across India

1. Licypriya Kangujam (Manipur)

One of India's youngest climate activists, Licypriya began her environmental journey at a very young age of six. She founded the "Child Movement" and has spoken at global forums including COP25, calling on Indian policymakers to enact stronger climate laws and introduce climate education in schools. Her simple yet powerful messages have sparked dialogues on eco-education and policy reforms across India.

2. Disha Ravi (Bengaluru)

Disha co-founded the Indian chapter of Fridays for Future, inspired by Greta Thunberg. Despite facing political pushback, she has been instrumental in organizing climate strikes, digital campaigns, and legal awareness drives to push for climate justice in India. Her activism reflects the growing voice of India's urban youth against environmental deregulation and destructive projects.

3. "Say Trees" Foundation (Bengaluru)

Founded by youth volunteers, this NGO has planted over 1.2 million trees across Indian cities and industrial belts. The group mobilizes school and college students for afforestation drives, rainwater harvesting workshops, and lake rejuvenation efforts, providing hands-on ecological engagement in urban settings.

4. Aaranyak (Assam):

Though led by researchers, Aaranyak's strength lies in mobilizing tribal and rural youth in conservation of the Northeast's rich biodiversity. The youth here play a pivotal role in human-wildlife conflict mitigation, anti-poaching patrols, and eco-tourism initiatives that support sustainable livelihoods.

Educational Reform and Green Curriculum

Many Indian youths are campaigning for stronger integration of climate science and sustainability into school curricula. Organizations like Teach for Green, based in Delhi, work with schools in rural and urban areas to promote environmental education through practical projects—like solar lamp-making, composting, and water testing.

Furthermore, India's National Education Policy 2020 includes a push towards experiential and environmental learning, a positive step that youth-led organizations are striving to scale.

Tech-Savvy Environmental Innovation

Indian youth are leveraging digital tools to address ecological issues such as:

The Jal Shakti App, developed by student tech enthusiasts, helps monitor water quality across districts and inform local authorities.

Reap Benefit, founded by young social entrepreneurs, trains students to use low-cost sensors and data tools to address sanitation, air quality, and waste management issues in their localities.

In Chennai, youth-led startups have created AI-based flood prediction models to reduce disaster impact during monsoons.

Cultural and Spiritual Connections to Nature

Unlike many parts of the world, India has a rich legacy of sacred ecology—rivers, forests, and mountains have traditionally been revered as divine entities. Young environmentalists today are reinterpreting these traditions to inspire community action.

For instance: In Rajasthan, youth are reviving sacred groves (Orans) through tree planting and folklore restoration. In Uttarakhand, youth have taken inspiration from Chipko-Andolan to prevent deforestation caused by road and dam projects.

Challenges Faced by Indian Youth in Environmental Activism

Despite their passion, Indian youth face several obstacles.

- **Lack of Institutional Support:** Schools and universities often lack the infrastructure or encouragement for environmental innovation.
- **Tokenism in Policy Forums:** Youth voices are often invited but rarely heard in meaningful policy dialogue.

- **Mental Health and Eco-Anxiety:** With rising awareness comes the emotional burden of confronting large-scale ecological collapse.
- **Digital Divide:** While urban youth access platforms for activism and education, rural youth may face connectivity and resource limitations.

Empowering Indian youth as true custodians of nature through:

Mandatory Climate Curriculum in primary and secondary schools aligned with SDGs and local ecological contexts.

Incentivize Green Entrepreneurship through seed grants, incubation hubs, and national awards.

Create Youth Climate Councils at district and state levels for policy advisory.


Leverage Technology for Inclusion, providing rural youth access to apps, satellite data, and open-source tools.

Policy and Structural Recommendations

The global scenario presents us with some very promising outcomes where youth are not only influencing educational curricula but are also advocating eco-sustainable policies. Based in Ghana, GAYO established the first Youth Climate Council in Africa to provide climate education and leadership training to young people. The organization empowers youth to engage in climate advocacy and policy discussions, fostering a generation of informed environmental leaders.

Young people have been at the forefront of global environmental movements, utilizing platforms like social media to mobilize and inspire action. An activist Greta Thunberg aged 15, initiated a solo protest outside the Swedish parliament, demanding stronger climate action. Her "Fridays for Future" movement rapidly influenced global leaders and institutions to prioritize climate policies.

Youth are increasingly engaging in legal avenues to hold governments accountable for environmental degradation. A group of 21 young plaintiffs filed a lawsuit against the U.S. government, alleging that its policies promoting fossil fuels violated their constitutional rights to a stable climate. Although the U.S. Supreme Court declined to hear the case, it significantly raised awareness about youth-led climate litigation.



Also, in Hawaii, 13 youths aged 9 to 18 filed a lawsuit against the state's Department of Transportation, arguing that its pro-fossil fuel transportation policies infringed upon their constitutional rights. The case resulted in a landmark legal settlement mandating Hawaii to expedite the transition to a zero-emission transportation system by 2045.

Youth are actively involved in grassroots conservation efforts, addressing local environmental challenges. A Kenyan environmental activist, Elizabeth Wathuti founded the Green Generation Initiative to engage young people in environmental conservation. Her organization has planted over 30,000 tree seedlings and conducts environmental education programs in schools, fostering a generation of eco-conscious individuals. Sam Benchejjib, an Indonesian youth environmentalist, established Sungai Watch to combat plastic pollution in Indonesia's rivers. The organization installs river barriers to prevent plastic waste from entering the ocean and has successfully cleaned several of the country's most polluted rivers.

Seed Mob, Australia's first Indigenous youth-led environmental organization, campaigns against environmentally harmful practices such as fracking. The organization empowers Indigenous youth to advocate for the protection of their lands and cultural heritage.

India stands at a critical juncture where its vast ecological wealth is increasingly under threat from climate change, deforestation, air and water pollution, and unsustainable development. At the same time, India also enjoys a powerful demographic dividend: over 50% of its population is below the age of 25. This youthful population is not merely inheriting the environmental crisis—they are actively confronting it. Across villages, towns, and cities, Indian youth are becoming catalysts for environmental sustainability, blending traditional ecological wisdom with modern science and activism. India's ecological future depends significantly on its young citizens. Their role in achieving harmony with nature is not symbolic—it is practical, innovative, and necessary.

As farmers, engineers, teachers, entrepreneurs, and activists, Indian youth can weave sustainability into every aspect of national development. Through activism, legal advocacy, community-based initiatives, and policy influence, young individuals can play a pivotal role in driving significant change in environmental practices. The convergence of India's civilizational wisdom with the dynamism of its youth promises to offer a rare opportunity.

My dear Indian youth! Its time for you to come forward and steer the nation—and the world—toward a truly regenerative and harmonious relationship with nature.

" Harmony with Nature and Sustainable Development "
RECONNECTING WITH NATURE:
THE KEY TO SUSTAINABLE LIVING



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May 22 is celebrated as International Day for Biological Diversity and reminds us every year that "Earth was created for all of us, not some of us". The United Nations Organization commemorates this day as an opportunity both to celebrate Earth's marvellous biodiversity, and to sensitize us regarding the task to preserve it. Biodiversity is the different kinds of life one finds in an area, which makes our natural world, like variety of plants, animals, fungi, micro-organisms, bacteria, etc. Each of these species support life on earth by maintaining an intricate balance and also provide food, water, shelter, medicines, syrup, adhesives, biofuels, etc. (WWF). However, there is an enormous biodiversity loss due to human activities, genetic diversity, climate change, and humans destroying habitats, industrialization, unsustainable land use, etc.

THE ROLE OF BIODIVERSITY IN OUR LIVES

Biodiversity provides us with essential services: food, clean water, medicine, climate regulation, and fertile soil. Yet, despite its importance, biodiversity is under threat. The 2019 IPBES Global Assessment Report warned that around one million species face extinction, many within decades, due to human activities.

There is a growing recognition that human well-being is deeply intertwined with the fate of the planet's biodiversity. Beyond providing material benefits, nature also nurtures our emotional and spiritual health. The Japanese practice of Shinrin-yoku, or "forest bathing," encourages people to immerse themselves in the sights, smells, and sounds of the forest, promoting relaxation and clarity.

The primary objectives of biodiversity conservation include Preserving Ecosystem Services, Protecting Genetic Diversity, Ensuring Sustainable Use of Natural Resources and Supporting Livelihoods and Cultures

Importance of biodiversity

Biodiversity is not a luxury, it's a necessity. It is the foundation of the air we breathe, the food we eat, and the water we drink. Here's why it matters in our everyday lives:

- **Food Security:** A diverse variety of crops and livestock helps ensure resilience in our food systems. Without biodiversity, one disease or climate shift could wipe out major food sources.
- **Medicines:** Many of our most effective medicines come from natural sources. Plants, fungi, and even animal toxins have led to treatments for everything from pain to cancer.
- **Climate Regulation:** Forests, oceans, and wetlands act as natural climate regulators. They absorb carbon dioxide, control flooding, and help stabilize temperatures.
- **Pollination:** Bees, butterflies, birds, and bats play a crucial role in pollinating crops. Without them, many fruits, vegetables, and nuts would disappear from our planet.
- **Cultural and Spiritual Value:** For many cultures, biodiversity is tied to identity, tradition, and spiritual practices. Nature inspires art, music, and a sense of wonder that no technology can replace.

RECONNECTING WITH NATURE

Many of us find ourselves increasingly detached from the natural environment in today's fast-paced, technology-driven world. We spend our days surrounded by concrete, screens, and machines, often forgetting the vibrant ecosystems and nature. A study by the University of Exeter found that people who spend at least two hours a week in natural settings report significantly better health and psychological well-being (White et al., 2019). Such findings show that nature isn't just scenic, it is medicinal, spiritual, and profoundly grounding. Living in harmony with nature and reconnecting with it doesn't mean giving up modern life. It means living with awareness, respect, and balance.

THE ESSENCE OF SUSTAINABLE DEVELOPMENT & SUSTAINABLE LIVING

Sustainable development, as defined by the United Nations in the Brundtland Report (1987), is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." It encompasses three interconnected pillars: environmental protection, social equity, and economic growth. However, true sustainability cannot be achieved if nature continues to be degraded. Thus, harmony with nature is not a peripheral concern, it is central to every goal of sustainable development. Sustainable development is not about sacrificing progress; it is about redefining it.

Living in Balance with the Natural World: Understanding Harmony with Nature

Harmony with nature refers to a state of balanced coexistence between humans and the natural environment. Modern development often ignores the interdependence of Nature and Humanity. Natural habitats are destroyed for agriculture, cities, and infrastructure. Fossil fuel combustion pollutes the air and warms the planet. The United Nations Environment Programme (UNEP) reports that ecosystem degradation affects the well-being of 3.2 billion people globally. If current trends continue, we may soon pass critical environmental tipping points. Harmony with nature is, therefore, not just an environmental issue, it is a human survival issue.

Practical Steps Toward Harmony and Sustainability

Shifting Values and Mindsets

Sustainable development begins with a change in consciousness. We must transition from a culture of consumerism to one of stewardship. Education, storytelling, and spiritual teachings can help nurture a sense of respect for nature, especially among young people.

Redesigning Economies

Current economic models prioritize growth over environmental limits. A shift toward a circular economy-where resources are reused, recycled, and regenerated-is essential.

Promoting Renewable Energy and Conservation

Fossil fuels are a major driver of climate change. Transitioning to solar, wind, and other renewable sources is key to reducing our environmental footprint. At the same time, energy conservation through efficiency and mindful consumption must be encouraged.

Protecting Biodiversity and Ecosystems

Conservation efforts-such as creating protected areas, restoring degraded lands, and preserving endangered species-are vital. Equally important is sustainable land use that supports both livelihoods and ecological integrity.

Empowering Communities and Indigenous Peoples

Many communities, particularly indigenous groups, have deep ecological knowledge and traditions that support sustainability. Recognizing their rights and involving them in environmental governance can lead to more resilient and equitable outcomes.

Policy and Global Cooperation

Achieving harmony with nature requires strong environmental laws, incentives for sustainable practices, and international collaboration. The Paris Agreement on climate change and the UN's Sustainable Development Goals (SDGs) offer frameworks for global action.

STEPS TOWARD RECONNECTION AND RESPONSIBILITY:

A shared responsibility

No one person can fix everything. But everyone can do something, and when governments, communities, businesses, and individuals join hands, we become powerful beyond measure. The beauty of biodiversity is that everyone can be part of protecting it.

- Plant native trees and flowers in your garden or community to support local wildlife.
- Reduce, reuse, recycle, and avoid single-use plastics to keep our oceans clean.
- Support local and sustainable farming, which protects soil health and reduces habitat destruction.
- Educate and advocate: teach especially children about the importance of wildlife and ecosystems.
- Support conservation efforts and hold leaders accountable for environmental policies.
- Most importantly, spend time in nature. When we connect with the natural world, we are more likely to protect it. It's hard to care about something you never see or experience.
- Community gardens for recreation and growing food.
- Rooftop gardens in urban cities.
- Practice mindful consumption and choose sustainable products.

International Biodiversity Day is not just a day to highlight problems, it's also a celebration of the beauty and resilience of life on Earth. All around the world, people are taking action and endangered species are making comebacks, forests are being restored, and communities are coming together to plant trees, clean rivers, and protect wildlife. Nature has an incredible capacity to heal, if we give it the chance.

Let us cherish, protect, and live in harmony with all forms of life so that future generations can inherit a world that is not only rich in technology but also rich in life, colour, and natural wonder.

" Harmony with Nature and Sustainable Development "

वृक्षारोपण आवश्यक है पर पर्याप्त नहीं

घनश्याम शुक्ला, भा.व.से.



निःसंदेह वैज्ञानिकों ने विगत सदियों में सतत खोजबीन करके आधुनिक सभ्यता को ढेर सारी उपलब्धियों का उपहार दिया है। इसी क्रम में इस ग्रह पर वनों के प्रबंधन एवं पर्यावरण संतुलन से संबंधित विषयों का भी विस्तृत विश्लेषण किया गया है। सतत बदलते पर्यावरण जैसे मुद्दे पर इन परिवर्तनों के कारण एवं उनके परिणाम समय-समय पर उच्च स्तरीय सभाओं एवं शिखर वार्ताओं में विश्व के सम्मुख रखे गए हैं। इन सारे अध्ययनों से एक बात तो स्पष्ट हो जाती है कि पृथ्वी के वातावरण पर सबसे अधिक प्रभाव मनुष्यों द्वारा ही डाला गया है। अब तो यह भी सुनिश्चित किया जा सकता है कि पृथ्वी के अलग-अलग भू-भागों पर स्थित अलग-अलग देशों के विकास एवं आर्थिक दशा से पर्यावरण पर किस प्रकार, कितना और किस दिशा में प्रभाव पड़ रहा है। कहते हैं कि अगर विश्व के अन्य देशों के नागरिक भी अमरिकी नागरिकों की ही तरह उसी अनुपात में प्राकृतिक संसाधनों का उपभोग करना आरंभ कर दें तो इस धरती पर मौजूद प्राकृतिक संसाधन कुछ वर्षों, महीनों एवं दिनों की गिनती में ही समाप्त प्रायः हो जाएंगे और यह आकलन है कि लगभग सात धरती के बराबर संसाधनों की आवश्यकता पड़ेगी। इस प्रकार यह स्पष्ट हो जाता है कि सीमित संसाधनों का असीमित उपभोग नहीं किया जा सकता। इस परिस्थिति में मनुष्य, जिसे इस पृथ्वी पर सर्वाधिक विकसित प्राणी माना जाता है, के सामने दो विकल्प मौजूद हैं- एक कि वह पर्यावरण पर पड़ने वाले दुष्परिणामों का निदान ढूंढे और दूसरा यह कि वह स्वयं अपनी जीवन शैली एवं जीवन यापन के तौर-तरीकों में कुछ ऐसे बदलाव लाएं जो उसे पर्यावरण पर विपरीत प्रभाव डालने की बजाए उसे उसके अनुकूल ढाले रखे। प्रथम उपाय यह मानता है कि वैज्ञानिक रूप से समस्याओं के ईलाज खोजे जा सकते हैं। इस सोच में कुछ सच्चाई भी है और गत दशकों में कुछ ऐसे उपाय खोजे भी गए हैं परंतु इन उपायों के साथ नित नवीन समस्याओं का जन्म भी हुआ है। हरित क्रान्ति करके हमने अत्यधिक अन्न तो उपजाया है परंतु खाद और कीटनाशकों के प्रयोग के कारण कैंसर जैसी बिमारियों को भी गले लगा लिया है। बढ़ती जनसंख्या को छत एवं आवास तो मुहैया कराए परंतु जीवन रक्षक वन संसाधनों का बहुत हरास हुआ। हमने स्वयं को प्रकृति की संतान मानने की बजाए उसका स्वामी मानने की कल्पना कर रखी है जबकि मानवता का अनुभव है कि प्रकृति सर्व शक्तिमान है जिस पर बहुधा मानवीय क्षमताएं असहाय पाई गई हैं। सदियों-सदियों से हमारी ऋषि भी यही कहते आए हैं- **माता भूमिः, पुत्रो अहं पृथिव्याः।**

दूसरी तरह की सोच जिसमें प्रकृति को बिना नुकसान पहुंचाए स्वयं को ढालने की बात है, एक दीर्घकालीन समाधान की तरफ इशारा करता है और इसी में मनुष्य की सर्वाधिक महत्ता भी है क्योंकि स्वयं में बदलाव करके वह स्वीकार करता है कि प्रकृति की रक्षा के विषय में उसके कंधों पर सर्वाधिक जिम्मेदारी है। पत्ते-पत्ते पर सिंचाई करने की बजाए पौधों की जड़ों पर ध्यान दिया जाना चाहिए। इशारा यह है कि अन्धाधुन्ध बढ़ती अनावश्यक जरूरतों और उपभोग पर समय रहते नियंत्रण स्थापित किया जाए। यह उपाय स्थाई होगा जो प्रकृति के बेतरतीब एवं अन्धाधुन्ध दोहन पर अंकुश लगाने में सफल होगा।

पृथ्वी मातर्मा मा हिन्सिः, मो अहं तवाम्

(हे पृथ्वी माता ! हम आपको हानि नहीं पहुंचायेंगे। आप भी हमें हानि मत पहुंचायिएगा)

विकसित और बुद्धिमान मनुष्य की स्वाभाविक फितरत यह है कि वह किसी प्रकार का दोष अपने ऊपर लेने के बजाए समस्याओं का कारण कहीं ओर खोजता है और अपनी बुद्धि-बल से नये-नये उपाय खोजता फिरता है। विश्व के बढ़ते औसत वैश्विक तापमान के संदर्भ में भी यही होता दिखता है। ग्रीन हाऊस इफेक्ट के कारण धरती का औसत तापमान बढ़ रहा है जिसका प्रमुख कारण वातावरण में कार्बन डाई आक्साईड की लगातार वृद्धि है। ग्रीन हाऊस गैसों जिनमें कार्बन डाई आक्साईड प्रमुख है, अत्यधिक

औद्योगिकीकरण जिसमें कारखाने और यातायात के लिए इस्तेमाल वाहन आदि हैं, के कारण बढ़ती जा रही है। जीवाश्म ईंधन का उपयोग लगातार बढ़ता जा रहा है। औद्योगिक क्रान्ति (सन् 1850) के आसपास वातावरण में कार्बन डाई आक्साईड का अनुपात 280 पी.पी.एम. था जो आज बढ़कर 427 पी.पी.एम. हो चुका है। आज यूरोपीय देशों विशेषकर दक्षिणी भाग में दैनिक तापमान 37-40 सेंटीग्रेट तक बढ़ चुका है जिसे एक चेतावनी की तरह समझा जाना चाहिए। यह बढ़ता तापमान जैव विविधता एवं कृषि उत्पादकता पर त्वरित विपरीत प्रभाव डालने वाला है। अब एक दिशा यह हो सकती है कि सरकारें इस दिशा में पुरजोर कोशिश करें कि हमारे क्रियाकलापों से कार्बन डाई आक्साईड कम से कम निर्मित हो जिसमें हमें अपनी प्राकृतिक संसाधनों के अत्यधिक उपभोग पर अंकुश लगाना पड़ेगा। वैज्ञानिकों का यह प्रयास है कि इस बढ़ती कार्बन डाई आक्साईड को अलग-अलग ढंग से ऐसी पिटारियों जिन्हें वे वैज्ञानिक भाषा में कार्बनसिंक कह रहे हैं, में बन्द कर लिया जाए ताकि वे वातावरण में उन्मुक्त विचरण न कर सकें। हम सभी जानते हैं कि पेड़-पौधे प्रकाश संश्लेषण प्रक्रिया में कार्बन डाई आक्साईड का उपयोग करके ग्लूकोज का निर्माण करते हैं। इस प्रक्रिया में वातावरण का कार्बन ग्लूकोज के रूप में पेड़ों में सदा के लिए बँध जाता है। इस एक ज्ञान के भरोसे कुछ पर्यावरण विशेषज्ञ अधिक से अधिक वृक्षारोपण करके पर्यावरण में बढ़ते कार्बन से मुक्ति की वकालत कर रहे हैं और बढ़ते औसत वैश्विक तापमान को भी नियंत्रित करने का दावा किया जाने लगा है। इसी बीच वास्तविकता यह है कि वातावरण में कार्बन डाई आक्साईड 400 पी.पी.एम. के पार हो रहा है जो पृथ्वी पर फैले जीवन एवं पारिस्थितिक तंत्र के लिए घातक है। इसको नियंत्रित करने के लिए वैश्विक स्तर पर किए जा रहे प्रयासों को देखते हुए तो ऐसा ही लगता है कि धमर्ज बढ़ता गया ज्यों-ज्यों दवा कीष जैसी कहावत कुछ ऐसी ही परिस्थितियों में चलन में आई होगी।

हर वर्ष मानसून के समय अनेकानेक संस्थाएं वृक्षारोपण अभियान में जुट जाती हैं। निःसंदेह उनके इरादे उत्तम हैं और उनके ये कार्यक्रम पर्यावरण संरक्षण की दिशा में महत्वपूर्ण योगदान दे रहे हैं, परंतु सिर्फ वृक्ष लगाकर हम बढ़ते औसत वैश्विक तापमान को नियंत्रित कर पाएंगे, इसमें संदेह है। इस संदर्भ में आई.आई.टी. बोम्बे के प्रोफेसर चेतन सिंह सौलंकी बताते हैं कि मात्र वृक्षारोपण करके वातावरण में बढ़ते कार्बन डाई आक्साईड के अनुपात को काबू नहीं किया जा सकता। उन्होंने आगे बताया है कि औसत वैश्विक प्रति व्यक्ति 4.7 टन कार्बन डाई आक्साईड प्रति वर्ष वातावरण में छोड़ता है वहीं एक परिपक्व वृक्ष प्रति वर्ष लगभग 20 किलोग्राम कार्बन डाई आक्साईड अवशोषित कर पाता है। इसका अर्थ यह हुआ कि प्रत्येक व्यक्ति को सिर्फ स्वयं की उत्सर्जित कार्बन डाई आक्साईड का मुकाबला करने के लिए प्रति वर्ष 235 पेड़ लगाने होंगे जिसमें से 20 प्रतिशत वृक्ष एक लम्बे अन्तराल तक जीवित रह पाते हैं। इसका मतलब है कि प्रति वर्ष प्रत्येक व्यक्ति को 1175 पेड़ लगाने की आवश्यकता होगी। अब इसे 8.3 अरब लोगों की वैश्विक आबादी से गुणा करें तो यह निकलकर आता है कि हर वर्ष 9.7 ट्रिलियन वृक्ष लगाने की जरूरत पड़ेगी। इस समय पृथ्वी पर लगभग 3 ट्रिलियन वृक्ष मौजूद हैं। इस प्रकार यह साफ हो जाता है कि हमें हर वर्ष पृथ्वी पर कुल मौजूद पेड़ों से 3 गुणा अधिक वृक्ष लगाने होंगे जोकि लगभग असंभव है परंतु इसका यह भी अभिप्राय कतई नहीं है कि प्रति वर्ष किए जा रहे वृक्षारोपण कार्यक्रम महत्वहीन है। यह वन जैव-विविधता, वर्षा चक्र एवं पारिस्थितिक संतुलन के लिए अत्यंत जरूरी है लेकिन इसके साथ ही साथ वास्तविक मुद्दे पर भी चिंतन किया जाना आवश्यक है और वह है संसाधनों का अत्यधिक और गैर जरूरी उपभोग करने की बढ़ती प्रवृत्ति।

राष्ट्रपिता महात्मा गांधी ने कहा कि प्रकृति के पास मनुष्यों की आवश्यकताओं को पूरा करने के लिए पर्याप्त संसाधन मौजूद हैं परंतु एक भी व्यक्ति की लिप्सा के लिए प्रकृति के सारे संसाधन अपर्याप्त हैं। प्रकृति के सबसे बुद्धिमान और विकसित प्राणी होने के कारण मनुष्य की नैतिक जिम्मेदारी है कि वह स्वयं प्राकृतिक संसाधनों के उपभोग के समय अपनी बुद्धिमता एवं विवेक का परिचय दें। अगर प्रकृति के विभिन्न रूपों में स्थाई रूप से कोई नुकसान मनुष्य के विकास की दौड़ के कारण पहुंचता है तो उससे विकसित होने का यह गौरव छिनता दिखाई देता है। ऐसा करके वह ना सिर्फ अपने पैरों पर कुल्हाड़ी मारता है बल्कि इस ग्रह पर मौजूद अनंत जीवन श्रृंखलाओं को क्षतिग्रस्त करता है। वातावरण में बढ़ती कार्बन डाई आक्साईड ऐसा ही एक अदृश्य कचरा है जिसे हम अपनी नियंत्रित एवं समझपूर्ण जीवनशैली से कम कर सकते हैं। हर उत्पाद जो हम खरीदते हैं, हर उडान जो हम लेते हैं, हर कपडा, हर भोजन और हर इलेक्ट्रॉनिक गेजेट सभी कार्बन हैं। यहां तक कि हर सुबह गुड मॉर्निंग संदेश भेजने में भी हम लगभग 4 ग्राम कार्बन डाई आक्साईड उत्सर्जित कर देते हैं। यहां यह बात स्पष्ट होती है कि कार्बन उत्सर्जन का ज्यादा हिस्सा कारखानों या बिजली संयंत्रों से नहीं आता बल्कि व्यक्तियों की अधिक से अधिक मांग के कारण इसमें वृद्धि होती है। जब तक हम उपभोग के प्रश्न को सम्बोधित नहीं करते, तब तक कितने भी पेड़ लगाए जाएं हम समस्या से नहीं बच पाएंगे। हमें एक नया दर्शन अपनाने की आवश्यकता है जहां व्यक्ति स्मार्ट एवं सचेत जीवन जीने की कला सीख पाए। जो जरूरी है उसका उपयोग करें, जो टाला जा सकता है उसे टाले और जो टाला नहीं जा सकता उसका उपयोग कम से कम करें।

" **Harmony with Nature and Sustainable Development** " **PLASTIC-FREE LIVING:** **A STEP TOWARDS ECOLOGICAL HARMONY**

Dr. Navdeep Singh, IFS



Published on the occasion of International Day for Biological Diversity – 22 May

The International Day for Biological Diversity (IDB), observed on May 22 each year, highlights the importance of preserving biodiversity and ecosystems that support life. In 2025, the theme "Harmony with Nature and Sustainable Development" stresses the critical link between human activities and environmental health. Among the many environmental challenges today, plastic pollution stands out as one of the most urgent. A shift toward a plastic-free lifestyle is essential for restoring ecological balance and promoting sustainability. This is especially relevant for places like Haryana, where urbanization, industrial growth, and rising plastic consumption pose serious environmental risks.

The Plastic Pollution Crisis in India and Haryana

India, with over 1.4 billion people, is one of the world's largest producers and consumers of plastic. According to a study published in Nature, India accounts for almost 20% of global plastic waste. The country generates 9.3 million tonnes of plastic waste annually, with 3.5 million tonnes mismanaged each year, leading to massive environmental harm. In Haryana, rapid urbanization has compounded the problem, with major cities like Gurugram and Faridabad contributing significantly to plastic waste. It is estimated that Haryana produces around 1,000 tons of plastic waste daily, much of which is not recycled or disposed of properly.

The Causes Behind Plastic Pollution

Several factors contribute to the growing plastic crisis:

1. **Weak Waste Management Infrastructure:** Many cities in India lack the infrastructure to properly manage plastic waste. While 77% of waste is dumped in open landfills, only about 60% of plastic waste is recycled, often through inefficient, informal processes.
2. **Open Burning and Landfilling:** Annually, 5.8 million tonnes of plastic waste are burned openly in India, emitting harmful pollutants and worsening air quality. In addition, 30% of plastic waste ends up in uncontrolled landfills, where it contaminates soil and water.
3. **Single-Use Plastics:** Items like plastic bags, straws, and packaging dominate the waste stream. Despite bans, single-use plastics still make up 43% of India's plastic waste due to poor enforcement and the availability of cheap alternatives.

4. **Inaccurate Waste Data:** Official waste collection rates are often overstated. A gap between reported and actual waste management figures complicates policy implementation and waste reduction efforts.
5. **Informal Recycling Sector:** The informal sector handles about 60% of India's plastic waste, but this sector operates without support, which can lead to poor recycling practices and further environmental damage.

The Environmental Impact of Plastic Pollution

Plastic pollution is highly detrimental due to plastics' durability. Instead of biodegrading, plastic fragments into microplastics that persist in the environment for centuries. This accumulation poses significant threats to biodiversity, human health, and ecosystems.

Impact on Wildlife and Biodiversity:

In Haryana, plastic waste severely impacts both land and aquatic ecosystems. The Yamuna River, which flows through the state, is a prime example. It is increasingly clogged with plastic debris, contaminating the water and harming aquatic life. Fish, amphibians, and birds ingest plastic, leading to injuries, malnutrition, and death. Terrestrial species, especially herbivores, also ingest plastic, which can block their digestive systems and cause internal damage.

Impact on Agriculture:

Agriculture is a vital part of Haryana's economy, but plastic waste is affecting soil health. Plastics in fields can reduce soil aeration and harm crop growth. Additionally, burning plastic waste releases toxic chemicals that further degrade soil quality. This not only impacts the environment but also threatens farmers' livelihoods.

Embracing Plastic-Free Living: A Solution

Adopting a plastic-free lifestyle is one of the most effective ways to combat the environmental damage caused by plastic pollution. By reducing or eliminating plastic use, people can switch to alternatives like biodegradable materials, glass, metal, and cloth, all of which have a far smaller environmental footprint. A plastic-free approach helps address the root causes of pollution, promoting sustainability.

Haryana's Efforts Toward a Plastic-Free Future

In response to the plastic crisis, Haryana has taken several steps to reduce plastic waste. The state government banned single-use plastics in 2018, including plastic bags, cups, and plates.

Additionally, awareness campaigns and improved waste management initiatives have been launched to encourage the adoption of eco-friendly alternatives. Gurugram, one of the state's largest cities, has implemented a Plastic Waste Management Plan, aimed at reducing plastic waste generation through improved waste segregation and recycling efforts.

Despite these efforts, the state still faces significant challenges. The informal waste sector, lack of public participation in waste segregation, and inadequate recycling infrastructure hinder progress toward a plastic-free Haryana.

Practical Steps Toward a Plastic-Free Haryana

To make a meaningful shift towards a plastic-free Haryana, various measures can be adopted:

1. **Encouraging Alternatives:** Promoting alternatives to plastic, such as cloth bags, paper packaging, and bamboo products, is essential. Local industries should be incentivized to produce and sell such eco-friendly alternatives, especially in rural areas where traditional packaging methods can be revived.
2. **Raising Public Awareness:** Public education campaigns are vital to highlight the risks of plastic pollution and encourage individuals and businesses to reduce plastic consumption. Schools, universities, and NGOs can play a critical role in these efforts.
3. **Improving Waste Segregation and Recycling:** Haryana must invest in improving its waste management infrastructure. Implementing proper waste segregation systems and expanding recycling programs will significantly reduce the amount of plastic waste entering landfills and waterways.
4. **Community Involvement:** Local communities can be encouraged to adopt sustainable practices, such as using alternative packaging in agriculture. Local artisans can also be supported to produce eco-friendly goods that reduce plastic reliance.
5. **Enforcing Legislation:** Stronger enforcement of plastic bans and penalties for illegal plastic dumping are necessary to ensure compliance. The state government should also offer incentives to industries that adopt sustainable packaging practices.

Ecological and Societal Benefits of a Plastic-Free Lifestyle

A plastic-free lifestyle offers multiple benefits, both ecological and societal. In Haryana, reducing plastic waste will lead to cleaner air, soil, and water, improving agricultural productivity and biodiversity. Healthier ecosystems will support a wider range of species, particularly that endemic to the region.

Reducing plastic use will also help Haryana meet India's broader sustainability goals, including the United Nations' Sustainable Development Goals (SDGs).

Moreover, the shift away from plastic can generate new green jobs in the alternative packaging sector and reduce healthcare costs related to pollution-induced diseases.

Conclusion

The transition to a plastic-free lifestyle is a crucial step toward achieving ecological harmony and sustainable development. While Haryana has made progress in combating plastic pollution, much more needs to be done. Collective action at all levels-individual, community, and government-is essential for a cleaner, healthier, and more sustainable future. As we mark the International Day for Biological Diversity, it is critical to recognize the role of plastic waste reduction in preserving biodiversity. By embracing a plastic-free lifestyle, we can ensure that future generations inherit a world in harmony with nature.

" **Harmony with Nature and Sustainable Development** " **INDIA'S CONVERGING INITIATIVES FOR BIODIVERSITY CONSERVATION**

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The International Day for Biological Diversity (IDB), celebrated each year on May 22, serves as a powerful reminder of the critical importance of biodiversity for sustainable development, human well-being, and planetary health. The 2025 theme, "Harmony With Nature and Sustainable Development," calls on governments, civil society, businesses, indigenous communities, youth, and individuals to actively contribute to the implementation of the Kunming-Montreal Global Biodiversity Framework (GBF), adopted at COP15 under the Convention on Biological Diversity (CBD).

India, one of the 17 mega-diverse countries in the world, is uniquely positioned to lead global efforts in biodiversity conservation. With over 45,000 plant species and 91,000 animal species, including several endemics, India's natural heritage is not just ecologically vital, but also culturally and economically significant. In the spirit of "Be Part of the Plan," India is adopting a whole-of-government and whole-of-society approach, ensuring convergence of multiple schemes, stakeholders, and strategies to halt biodiversity loss and restore ecosystems.

1. Implementation of the Kunming-Montreal Global Biodiversity Framework

India was an active participant in shaping the Kunming-Montreal GBF, which sets out four global goals and 23 targets to be achieved by 2030. India is aligning its National Biodiversity Strategy and Action Plan (NBSAP) with these targets, ensuring integration with national priorities such as sustainable agriculture, water security, climate resilience, and disaster risk reduction. The revised NBSAP emphasizes 30x30 targets (protecting 30% of terrestrial and marine areas), equitable access to genetic resources, and enhanced biodiversity financing.

2. Mainstreaming Biodiversity through Convergence of Schemes

One of the most significant biodiversity initiatives in India is the convergence of sectoral schemes with biodiversity conservation goals. Programs like MGNREGA, National Mission for Clean Ganga (NMCG), Jal Shakti Abhiyan, National Bamboo Mission, and PM Kusum are being synergized with the objectives of biodiversity conservation through eco-restoration, native species plantation, soil health improvement, and community-led afforestation.

In Haryana, the Aravalli Green Wall Project is a stellar example of such convergence, bringing together Forest Department, Rural Development, Panchayati Raj Institutions, and CSR support for ecological restoration of degraded Aravalli landscapes using native flora.

The project not only improves biodiversity but also enhances water recharge and carbon sequestration.

3. Biodiversity in Agriculture: Promoting Agro-Biodiversity and Traditional Knowledge

India's rich agrobiodiversity includes over 160 cultivated species and thousands of landraces. Initiatives under the National Mission on Sustainable Agriculture (NMSA), Paramparagat Krishi Vikas Yojana (PKVY), and Plant Genetic Resources Conservation have helped conserve indigenous varieties and traditional farming systems that are resilient to climate change.

State Biodiversity Boards and Biodiversity Management Committees (BMCs), under the Biological Diversity Act, 2002, are documenting traditional knowledge through People's Biodiversity Registers (PBRs). Over 2.9 lakh PBRs have been created, making India a global leader in community-based biodiversity documentation.

4. Community Participation through Biodiversity Management Committees (BMCs)

The CBD emphasizes the importance of indigenous peoples and local communities (IPLCs) in biodiversity conservation. India has operationalized over 2.7 lakh BMCs at the Panchayat level, empowering them with roles in decision-making, conservation planning, and benefit-sharing.

States like Maharashtra, Kerala, and Odisha have pioneered community-led conservation reserves, sacred groves restoration, and marine biodiversity monitoring through local fisherfolk and coastal communities. "Be Part of the Plan" is thus not just a slogan, but a lived reality in these landscapes.

5. Restoration and Rewilding: From Grassroots to Landscape Scale

In line with Target 2 of the GBF-to restore at least 30% of degraded ecosystems by 2030-India is scaling up forest landscape restoration, wetland rejuvenation, and coral reef revival.

The Namami Gange Programme, which incorporates biodiversity conservation through fish diversity monitoring, turtle nesting conservation, and riverine ecosystem restoration, is an international model for integrating river health with biodiversity.

Likewise, the National Wetland Mission under Amrit Dharohar and MISHTI scheme for mangrove plantation are designed to restore ecologically sensitive habitats, ensuring community participation and climate resilience.

6. Wildlife Conservation and Species Recovery

India has launched several flagship programs for species recovery: from tigers under Project Tiger to elephants, vultures, lions, and bustards. The successful reintroduction of cheetahs in Kuno National Park, the conservation breeding of vultures in Pinjore (Haryana), and community-led blackbuck conservation in Gujarat and Haryana reflect targeted species recovery aligned with biodiversity goals.

The expansion of Protected Areas Network, along with the declaration of Eco-Sensitive Zones (ESZs) and Conservation Reserves, is helping protect key habitats while balancing community livelihoods.

7. Biodiversity and Youth Engagement: Eco-clubs and Citizen Science

Recognizing that the future of biodiversity lies in the hands of the youth, India has scaled up its National Green Corps (NGC) Eco-Clubs, operating in over 1 lakh schools. These clubs actively participate in plantation drives, cleanliness campaigns, and biodiversity documentation.

New digital tools and apps such as naturalist India, India Biodiversity Portal, and Meri Life movement encourage citizen science, enabling ordinary citizens to contribute biodiversity observations and climate actions.

8. Biodiversity Financing and Access Benefit Sharing (ABS)

Innovative financing mechanisms such as Green Bonds, Payment for Ecosystem Services, and CSR partnerships are being mainstreamed into biodiversity programs. The National CAMPA Authority and Compensatory Afforestation funds are increasingly being directed toward restoring degraded ecosystems with biodiversity-sensitive approaches.

India has also operationalized the Access and Benefit Sharing (ABS) mechanism under the BD Act, with communities receiving benefits for the use of biological resources by companies and researchers.

9. Global Leadership and South-South Cooperation

India has taken leadership roles in platforms such as the Global Biodiversity Framework Fund, GBF Implementation Alliance, and India-led Coalition for Disaster Resilient Infrastructure (CDRI) to promote biodiversity-inclusive risk governance. Through South-South cooperation, India is sharing expertise in community forestry, medicinal plant conservation, and biodiversity law with countries across Africa, Asia, and Latin America.

Conclusion: Everyone Must Be Part of the Plan

The theme “Be Part of the Plan” is both a call to action and an invitation to responsibility. Whether it is a policymaker enforcing biodiversity-friendly policies, a student in a school eco-club, a farmer cultivating indigenous seeds, or a forest officer patrolling a sanctuary—each action matters.

India’s biodiversity initiatives are increasingly interlinked with climate action, health, and sustainable development. The country is showing how through convergence of schemes, community participation, and strong legal frameworks, the vision of the Global Biodiversity Framework can be realized.

Let this International Day for Biological Diversity be not just a commemoration but a commitment—a collective pledge to ensure that we are all part of the plan to safeguard our planet’s living legacy.



HARMONY WITH NATURE AND SUSTAINABLE DEVELOPMENT: A VISION FOR A BALANCED FUTURE

We are honoured to support the International Day for Biological Diversity 2025 initiative of the Haryana State Biodiversity Board. Our goal of promoting a mutually beneficial relationship between human development and the natural world is perfectly aligned with the theme, "Harmony with Nature and Sustainable Development." This theme emphasizes how urgently biodiversity conservation must be incorporated into development frameworks in Haryana, a state rich in ecological and cultural diversity, to ensure that ecosystems flourish alongside human well-being.

The basis of life is biodiversity, which sustains ecosystems that offer vital services like food security, clean water, and air. Biodiversity supports economic and cultural prosperity in Haryana, from the agricultural landscapes to the Aravalli forests and Morni Hills to its agricultural landscapes. However, this delicate balance is in danger due to factors like intensive agriculture, urbanization, and climate change. The International Day for Biological Diversity, observed on May 22 by the UN, encourages creative ways to bring people back into balance with the natural world. Drawing on Everain's experience and international best practices, we describe below strategies that combine the functions of Biodiversity Management Committees (BMCs), People's Biodiversity Registers (PBRs), Access and Benefit Sharing (ABS) guidelines, and Haryana's special pension for old trees initiative.

1. The Role of People's Biodiversity Registers (PBRs)

The Biological Diversity Act of 2002 required the creation of People's Biodiversity Registers (PBRs), which are essential instruments for recording regional biodiversity and related traditional knowledge (TK). PBRs are created in accordance with the National Biodiversity Board's (NBA) standard formats and serve as thorough documentation of biological resources, such as habitats, landraces, folk varieties, domesticated breeds, and microorganisms, in addition to documenting traditional knowledge (TK).

PBRs allow communities to record indigenous crops or species like the khejri tree, dhak tree to protecting genetic diversity and cultural heritage (e.g. Manger Bani). They involve local stakeholders in a participatory manner to guarantee a collective approach to its development and use.

By locating resources and knowledge holders and guaranteeing just compensation for their use, PBRs also make Access and Benefit Sharing (ABS) easier.

2. Specific Points from Biological Diversity Rules 2023

India's governance of biodiversity is strengthened by the Biological Diversity (Amendment) Act, 2023, and its implementing regulations. The 2023 Rules include a crucial clause that highlights the responsibility of BMCs in upholding and verifying PBRs, which need to be countersigned by the State Biodiversity Board to guarantee authenticity. To increase transparency, the Rules also require BMCs to keep thorough records of biological resource access, collection costs, and benefit-sharing arrangements. The 2023 framework also promotes digital integration, like the ePBR system, to safeguard traditional knowledge from exploitation and track resources over time. These clauses support Haryana's efforts to methodically record its biodiversity and guarantee that community-led and data-driven conservation and sustainable use are implemented.

3. Access and Benefit Sharing: New Guidelines, 2025

Updated ABS guidelines are introduced by the Biological Diversity (Access to Biological Resources and Knowledge Associated Thereto and Fair and Equitable Sharing of Benefits) Regulation 2025, which was notified on April 29, 2025. Benefit sharing is required by these regulations and is determined by the yearly turnover of entities that have access to biological resources, including digital sequence data. Industries that generate between Rs 5 crore and Rs 50 crore in revenue, for example, are required to share 0.2% of their gross ex-factory sale price (excluding taxes) each year. Benefit sharing can vary from 5% to more than 20% of sales for valuable resources like sandalwood or endangered species. Benefits must still be distributed for products made from uncultivated plants, but cultivated medicinal plants are notably exempt, bolstering Haryana's traditional medicine industry. In order to empower local communities, these funds may be directed to BMCs' Local Biodiversity Fund in order to guarantee that Haryana's farmers and tribal communities profit from resources like medicinal herbs growing naturally in their areas.

4. The Role of Biodiversity Management Committees (BMCs)

BMCs, which were created in accordance with Section 41(1) of the Biological Diversity Act of 2002, play a crucial role in encouraging biodiversity documentation, conservation, and sustainable use at the local level. As of January 2025, Haryana had over 6000 BMCs.

These committees prepare PBRs, control access to biological resources, and collect fees for commercial use. Along with promoting biodiversity education, BMCs oversee the identification and designation of Biodiversity Heritage Sites, which include sacred groves and heritage trees. In order to negotiate ABS agreements and guarantee that local communities benefit, they must become even more powerful.

5. Haryana's Pension for Old Trees Initiative

Harmony with nature is exemplified by Haryana's creative pension for old trees initiative, which was started to preserve heritage trees. In recognition of the ecological and cultural significance of trees, this program offers financial rewards to landowners who maintain them after a specific age. This program protects trees that support biodiversity, provide shade, and sequester carbon, such as banyans and peepals. By prioritizing natural capital over immediate financial gains, the initiative supports sustainable development.

6. Integrating Strategies for Sustainable Development

To achieve harmony with nature, Haryana must integrate these elements into a cohesive strategy. PBRs and BMCs provide the foundation for community-led conservation, while ABS guidelines ensure equitable benefits. The pension for old trees initiative can be expanded to include agroforestry, encouraging farmers to plant native species. Technology, such as drone-based monitoring and AI-driven species tracking, can support BMCs in managing ecosystems. Educational programs in schools can foster awareness, while corporate partnerships can fund conservation through CSR and other similar initiatives.

A Call to Action

We must envisage to reconsider how we interact with the environment by the theme of "Harmony with Nature and Sustainable Development." A strong foundation for conservation and sustainable development is offered in Haryana by PBRs, BMCs, ABS guidelines, and programs like the pension for old trees. Haryana has the potential to lead the country in sustainable development by empowering communities, utilizing technology, and coordinating policies with international agreements such as the Convention on Biological Diversity. Everain is committed to partnering with the Haryana State Biodiversity Board to realize this vision, ensuring that biodiversity thrives alongside human prosperity for generations to come.

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" **Harmony with Nature and Sustainable Development** " **THROUGH WILD MEDICINAL PLANTS:** **SOME INITIAL POINTERS**

Dr. Somashekha BS Scientist -'F'



(TSG's domain of work: Conservation of wild Medicinal plants and Revitalisation of Healthcare traditions}

Harmony with Nature is the fundamental principle for Sustainable Development.

However, this straight forward relationship is not readily recognized by the common citizenry. But, one has to understand the imminent connections between the natural world and human life, in order to recognize this fundamental element. This understanding will then help them make environmentally friendly decisions and choices that ensure sustainable development.

All that is needed is to relook at and reflect on such diverse connections already present. One will agree that, all the basic requirements of human life such as Food, Water, Fibre (cotton, wool, silk), Fuel (coal, charcoal, biomass, biofuel, petro fuels), Shelter (housing, furniture, construction material), Fodder, Fertilizer, Pharma (medicine, drug, healthcare) and other life's needs are either directly and indirectly sourced from the natural world which includes, plants, animals and microorganisms and other biodiversity elements.

Not only that, the Natural world is needed for the overall human's wellbeing. Nature assures us of such well-being through several ecological services surrounding us: such as clean air, clean water, clean ambience, through mountains-hills, forests-river-lakes-ponds-oceans, regulation of climate, keeping fertile soils and productive landscapes for food crops, insects and animals that perform pollination and seed dispersal in plants, cultural connections with the Gods and other spiritual elements - all of these are rooted in the natural biological world.

All of the finished commercial commodities needed for a modern human life -whether naturally prepared or technologically manufactured - are invariably made by using the basic raw material gathered from the biological world-which is the natural capital for the modern life's commodities.

One will be surprised to realize that, Human life cannot exist without this biodiversity- plants animals, microorganisms, genes, landscapes etc.

Since all the necessary raw material needed to meet the diverse requirements of human society in the modern world originates from Nature and is sourced from the Natural Capital, the need for ensuring that this Natural Capital will be always available in its original and complete form, becomes a social and civic responsibility of the citizens.

Human wellbeing is essentially an outcome of following and adapting healthy lifestyles which is inclusive of good quality food, medicine, material, practices, thoughts and emotions. Being in the tropical world, our country is bestowed with a rich diversity of medicinal plants in all its diverse landscapes. Our traditional healthcare understanding is rooted among the several local communities and has evolved over many generations based on locally available medicinal plants; this is very well reflected in the diverse traditional lifestyles, customs and practices found in the households, including – traditional diets, season specific diet, special festival foods, household healthcare formulations, daily practices and several customs, rituals, taboos, dos and don'ts etc. All of these support human healthcare at least from 3 angles: for treating ailments, for building immunity and disease resistance, and for promoting one's health. Such holistic living in turn will lead to nature friendly life. Such time tested practices which have captured the traditional wisdom aiming at harmony with nature, should be brought back and adapted as an affordable and cost effective means to ensure “Living in Harmony with Nature for Sustainable development”.

It is necessary to note that, our Food, Medicine and the present day “Wellness products” are actually intertwined wherein, one is naturally present in the other. A careful reflection on our traditional practices will return several such pointers for easy adaptation. Several seemingly simple, weedy plants found in fallow lands and wild landscapes in our neighborhood are the best examples to illustrate the above point. These gregarious unattractive plants which are easily found, are actually excellent source of vitamins, mineral supplements, tonics, health nourishments, and wellness components. Many of them are traditionally known as wild leafy vegetables. Such wild weedy plants need to be recognized and brought back as simple “Natural wellness kits” for use in modern living. Our local administration bodies and Schools can play an important role in such initiatives.

By carefully choosing more and more nature based produce and products, nature friendly lifestyles, revisiting nature friendly principles, traditional teachings, and other time-tested practices it is possible to build harmony with Nature for sustainable development. The following points may serve as the beginning points:

- Revisit traditional vedic teachings that have demonstrated the nature harmony living.
- Revisit conservation friendly practices such as reverence to trees, worshipping nature and landscapes.
- Go for nature friendly foods produced from alternative farms away from chemical –intensive cropping.
- Rejuvenate the forgotten community practices of gathering farm produce and wild plants.
- Go for locally available fruit and vegetables sourced from wild landscapes and fallow fields.
- Follow as much as possible guidelines suggested under LIFE (Lifestyle for Environment).
- Develop urban green landscapes, build greenery in your living spaces and premises by planting more and more trees.
- Choose Climate Change friendly practices - minimize dependency on long distance travelled foods and frozen foods; minimize the use of packaged products that generate high garbage.
- Reduce the dependency on petroleum fuels. Look for alternative green fuels-such as solar energy, wind energy and Hydrogen.

It is the fundamental part of social and civic responsibility to remain aware of the intricacies that surround the connections between the Natural world and the Humans. It will make us more and more Nature friendly and Climate Change friendly- which in turn contribute to Sustainable Future Development.

" **Harmony with Nature and Sustainable Development** "

Satish Sharma

President - Chhavi Charitable Society




(TSG's domain of Work: Conservation of Flora & Fauna)

As the human population continues to grow and technological advancements reshape our world, the delicate balance between progress and preservation becomes increasingly critical. Achieving harmony with nature while pursuing sustainable development is not merely an idealistic goal, but an imperative for the continued well-being of all life on Earth. This equilibrium necessitates a profound respect for ecological systems, particularly focusing on the conservation of wildlife species and wild medicinal plants, which are invaluable for both environmental stability and human health.

Harmony with nature implies recognizing our intrinsic connection to the natural world and understanding that our prosperity is inextricably linked to its health. For centuries, many indigenous cultures have lived in accordance with this principle, fostering a deep reverence for the land and its resources. However, modern industrial societies, driven by relentless consumption and a disconnect from natural cycles, have often prioritized short-term economic gains over long-term environmental sustainability. This approach has led to widespread deforestation, pollution, climate change, and the alarming decline of biodiversity - all symptomatic of a disharmonious relationship with nature.

Sustainable development, therefore, emerges as the framework for rectifying this imbalance. It is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. This holistic approach integrates economic, social, and environmental considerations, ensuring that progress does not come at the cost of ecological degradation. A cornerstone of sustainable development is the protection and conservation of biodiversity, with particular emphasis on wildlife species and wild medicinal plants.

Wildlife species are not mere aesthetic embellishments; they are integral components of healthy ecosystems. From pollinators like bees and butterflies crucial for agriculture, to predators that regulate prey populations and maintain ecological balance, each species plays a vital role. The loss of a single species can trigger a cascading effect, disrupting food webs and ultimately weakening entire ecosystems, making them more vulnerable to collapse. Conservation efforts, such as establishing protected areas, combating poaching, and restoring habitats, are essential for safeguarding this intricate web of life. Beyond their ecological significance, many wildlife species hold cultural and economic value, supporting ecotourism and inspiring scientific research.



Equally critical, yet often overlooked, is the conservation of wild medicinal plants. For millennia, humanity has relied on the healing power of nature, with countless traditional medicine systems rooted in the knowledge of medicinal flora. Even today, a significant portion of modern pharmaceuticals are derived from plant compounds, and many more are yet to be discovered. Wild medicinal plants are an irreplaceable genetic reservoir, offering potential cures for current and future diseases. However, habitat destruction, over-harvesting and climate change are rapidly eroding this natural pharmacy. Sustainable harvesting practices, cultivation of endangered species, and the preservation of their natural habitats are paramount to ensure these vital resources are available for generations to come. This also entails respecting and learning from the traditional ecological knowledge of communities that have long stewarded these plant resources.

Achieving harmony with nature and sustainable development is a complex undertaking that requires a paradigm shift in our thinking and actions. It demands responsible consumption, investment in renewable energy, promotion of circular economies, and a commitment to environmental education. It also necessitates robust policy frameworks that prioritize conservation, equitable resource distribution, and international cooperation. Ultimately, it is about recognizing that we are not separate from nature, but an intrinsic part of it. By fostering a deep respect for wildlife species and wild medicinal plants, and by integrating their conservation into all facets of our development, we can forge a future where humanity thrives in true and lasting harmony with the natural world.



INTERNATIONAL DAY FOR BIODIVERSITY 2025

Harmony with nature and sustainable development



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