

# Our Solutions are in Nature...

## THE CHALLENGE

In the world climate change impacts are increasing in frequency and intensity

## THE OPPORTUNITY

This presents an ideal setting for Nature-based solution to deliver climate resilient infrastructure

Torrential downpours driving increased landslides and flood risk.

Variable precipitation, and weather patterns driving increased drought risk

CO<sub>2</sub> emission driving Global warming

Green roofs can reduce flows to storm water drainage systems

Sun is the perennial source of energy.

Forests and vegetation can reduce food & landslide risk, and regulate water supply.

Storm surge and sea level rise driving coastal flood risk

Corals can protect beaches from erosion and dissipate storm surge.

Mangrove can reduce inland flood risk

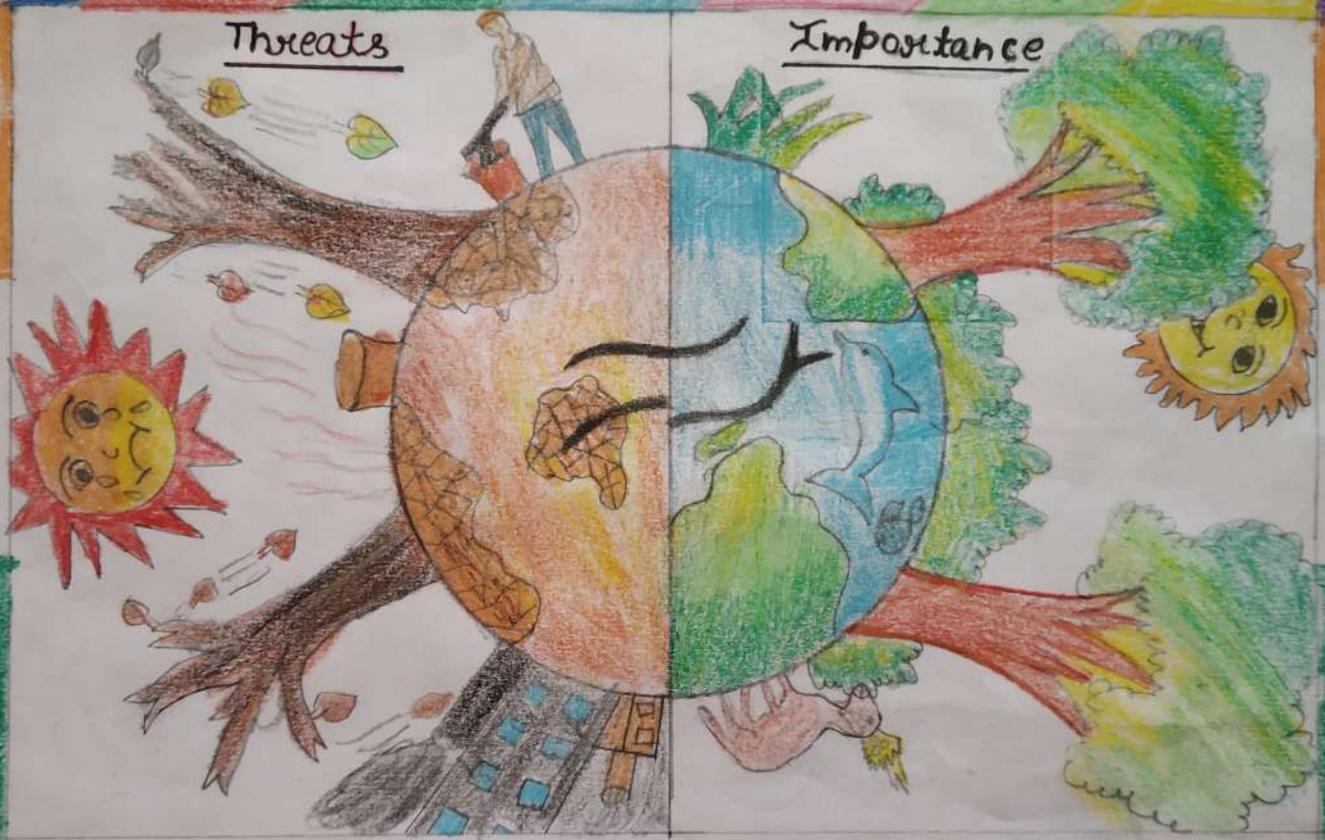
INVESTING IN NATURE  
CAN PROVIDE  
EFFECTIVE  
SOLUTIONS

- ~ sustainable
- ~ resilient to change
- ~ contribute to green growth
- ~ create new jobs

POOJA TIWARI (BSRS)

Threats

Importance



INTERNATIONAL DAY OF BIODIVERSITY

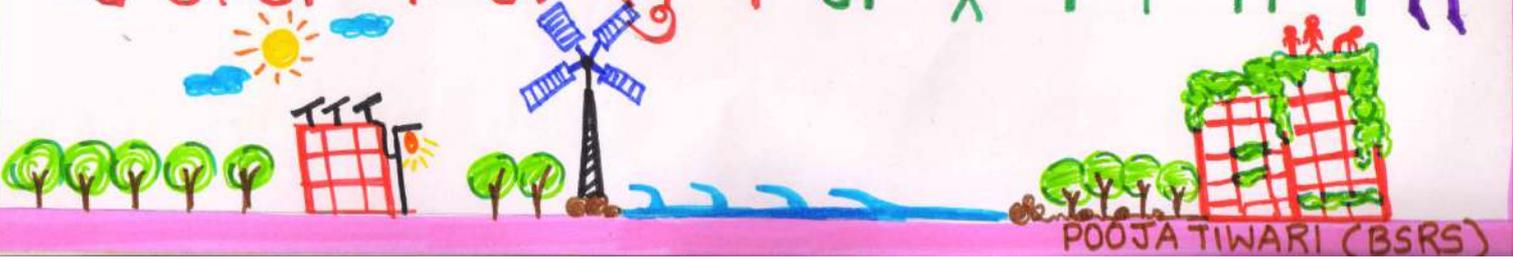
Devansh  
Prakash  
Mishra



“ प्रकृति का जब रखेंगे ध्यान  
तभी बनेगा देश महान  
प्रकृति देती जीवनदान  
हम भी करें इसका सम्मान ”

Devshwar Prakash  
Mishra.

प्रकृति निज निरंतर रूप बदलती,  
मुझे बनालो अपना कहती।  
मुझमें है अवसरों का भंडार,  
इससे करो तुम राष्ट्र-निर्माण॥



By Dr. (Mrs.) Sandhya Misra

## English

- Diversity is our Identity and we are all inter-linked, If we break the link, surely we all will extinct.
- In the ocean of scarcity, we are sailing in the boat of biodiversity. A little hole in the diversity will lead to severe adversity.

## Hindi

- जब उपयोग के साथ योग जरूरी है, तो फिर क्यों विविधताओं के सेवन करने वालों ने इसकी सेवा से बनाई दूरी है
- यह विधि का विधान है की यहाँ विविधता विद्यमान है, वर्तमान में इसको क्षति पहुंचना, है भविष्य में जैसे स्वयं के अस्तित्व पर प्रश्नचिन्ह लगाना
- विविधता पर पड़े शतक वर्षों के घावों को प्रकृति ने शतक दिवसों में ही भर लिया, देखो तो कैसे लाभ और लोभ के क्षलावे में मानव ने स्वयं को ही हर लिया

निर्भर जिसपे हम सब का जीवन

क्यों उसे हम खतरे में डाल रहे ?

प्रकृति से जब प्यार हमे है

फिर जंगल काट, क्यों जानवरो को पिंजरे में डाल रहे है ?

आओ जैव-विविधता को जान ले

जीव-जंतु और वनस्पतिया है सच्चे साथी इसको हम पहचान ले

प्रकृति से ही है जीवन हमारा

अब इसे बचाने की हम ठान ले ॥

साधना विश्वकर्मा

## **“Our Solutions are in Nature”**

Nature provides and in return it wants to live and flourish. Nature endures all the species along with the human race to thrive, tolerating all the conflicts among the living creatures. Regardless of all the scientific advances human race is making, we are still completely dependent on the healthy and vibrant ecosystems. Various ecosystems on earth serve as a source of constant providers of energy and health. Many solutions for our sustainable development lie within nature. Biodiversity ensures that we have adequate air, fertile lands, food and water to survive. It helps to regulate climate and rainfall. It also alleviates the impact of natural disasters such as storms and landslides. Healthy ecosystems and its balance can also protect against the human race spread of diseases and can be source of many medicines. Nature also provides economic security with industries such as agriculture, food and beverages being most dependent on nature. Hence, it is of at most necessity that we protect biodiversity and maintain a healthy relationship with the natural world. We have been neglecting the direct connection between our activities and its impact on biodiversity. This is due to our disconnection with nature. Before it's too late, we should re-integrate ourselves into nature and recognize its interests. We must stop forcing our anthropocentric world view upon it and start using our perceptions and mindfulness towards its protection to build a future of life in harmony with nature. One must understand our direct connection with the ecosystems and how it can source the solution to all our holistic needs and problems.

**Dr. Mohammad Arif**  
**Scientist ‘B’**

## **“International day for Biological Diversity” ‘Our Solutions are in nature**

The system of nature, of which man is a part, is extraordinary of all cybernetic systems due to its self-balancing, self-adjusting and self-cleansing capacity. There is a deep interconnectedness of all life on earth. The world's 7.6 billion people represent just 0.01% of all living creatures but the patriarchal ego and collective neurosis have disrupted the delicate balance of nature and created phallic missiles of mass destruction resulting into the loss of 83% of all wild mammals and half of plants. The uncontrolled action of man has challenged nature's self-balancing capacity and reached an alarming situation questioning his own existence in future. On one hand where we were fighting hard to find a piecemeal solution to combat the situation, sudden spread of pandemic made it the most urgent. This pandemic is threatening the human life and posing grave danger to its existence across the globe. If we focus on the other side nature has utilized this time in healing, repairing and rejuvenating itself to fix the problems that were questioning our future existence. Though the situation is critical for the present generation but simultaneously nature has healed and rejuvenated all the basic resources (ozone layer, clean air, water, natural resources) and has laid a good foundation for the future generations. Through this episode of pandemic nature has taught mankind that they are the part of natural system, hence, must not try to interfere in its smooth running and should not try his cranial capacity in running the most complex system. It is clearly demonstrated that nature has all the solution to fix the problems arising in its inter-linked network. It is high time for mankind to realise that nature can full fill our need not greed and we should learn to live in co-existence with other species by respecting and maintain the eternal balance in nature's biodiversity

**To halt the decline of an ecosystem, it is necessary to think like an ecosystem**

(Douglas P. Wheeler)

## Short Essay

जलवायु परिवर्तन, शहरीकरण खतरनाक खाद्य सुरक्षा और जल संसाधन प्रावधान और आपदा जोखिम जैसी चुनौतियों का सामना समाजों को तेजी से करना पड़ता है। इन चुनौतियों का जवाब देने के लिए एक दृष्टिकोण तकनीकी रणनीतियों पर एकलपता पर निर्भर रहना है।

एक वैकल्पिक तरीका यह है कि सामाजिक-पारिस्थितिक तंत्र को व्यापक तरीके से प्रबन्धित किया जाए ताकि मानवों के लिए पारिस्थितिकी तंत्र सेवाओं के वितरण में निरंतरता और वृद्धि हो सके।

पारिस्थितिकी तंत्र सेवाओं को अक्सर मानव कल्याण और अर्थव्यवस्था के लिए तत्काल लाभ के संदर्भ में मूल्यवान माना जाता है क्योंकि स्वच्छता, लोगों और पर्यावरण को होने वाले लाभों पर ध्यान केंद्रित करता है, ताकि स्थायी समाधानों के लिए अनुमति दी जा सके।

वैज्ञानिक अनुसंधान अब पहले से कहीं अधिक स्पष्ट रूप से इंगित करता है कि हमारे कार्बन पदचिह्न - कार्बन डाइऑक्साइड ( $CO_2$ ) की वायुमण्डल में रिहाई, जहाँ यह तथाकथित ग्रीनहाउस प्रभाव के माध्यम से ग्लोबल वार्मिंग में योगदान देता है - अब हमारे पारिस्थितिक तंत्र और हमारे जीवन के तरीके को खतरा है।

पारिस्थितिकीय तंत्र को संतुलित करने के लिए घेंड़-पौधों और जंगलों की कटाई रोककर वृक्षारोपण करना होगा तथा ऊर्जा और जल का संरक्षण करना होगा। अंततः हम ही प्रकृति के असली उपभोक्ता हैं और हमें ही इसका ध्यान रखना होगा।

देवेश्वर प्रकाश मिश्रा

बी. एस. आई. पी.

लखनऊ