

WORLD ENVIRONMENT DAY

With complements from

AIM ENVIRO

www.aimenviro.com aim.enviro@gmail.com

World Environment Day

- World Environment Day (WED) was established by the United Nations (UN) General Assembly in 1972 to mark the opening of the Stockholm Conference on the Human Environment.
- WED was first celebrated in 1974 on 5th June.
- WED is one of the principal vehicles through which the UN stimulates worldwide awareness of the environment and enhances political attention and action.
- World Environment Day is the most renowned day for environmental action; engaging governments, businesses, celebrities and citizens to focus their efforts on a pressing environmental issue.

5 June, World Environment Day





5 JUNE

EVERY YEAR, EVERYWHERE, EVERYONE.

World Environment Day Theme and Host Country

- Each WED is organized around a theme that focuses attention on a particularly pressing environmental concern.
- WED 2020 theme is 'Biodiversity'.
- Every year WED has a different global host country for the official celebrations. This year's host is Colombia in Partnership with Germany.









World Environment Day 2020



COLOMBIA 2020 BIODIVERSITY

WED 2020: Host Country - Colombia

- 2020 is a critical year for nations' commitments to preserving and restoring biodiversity. Next year is the launch for UN Decade On Ecosystem Restoration (2021-2030), intended to massively scale up the restoration of degraded and destroyed ecosystems.
- Colombia is listed as one of the world's "megadiverse" countries and sustaining close to 10 per cent of the planet's biodiversity. Colombia ranks first in bird and orchid species diversity and second in plants, butterflies, freshwater fish and amphibians. The country has several areas of high biological diversity in Andean ecosystems and also has part of the Amazon rainforest and the humid ecosystems of the Chocó biogeographical area.





COLOMBIA 2020 BIODIVERSITY



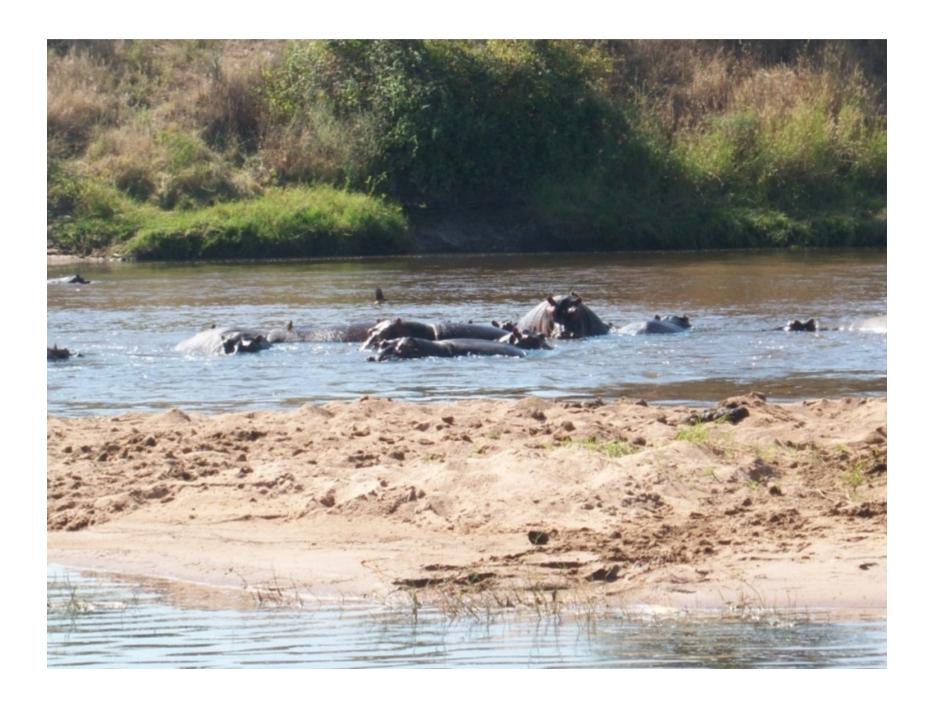
Biodiversity and It's Importance

- Biodiversity is the variability of living things (from plants & animals to fungi & bacteria and the genetic diversity found among them) that makes up life on Earth. It also includes the ecosystems (oceans, forests, mountain environments & coral reefs; housing about 8 million species on earth.
- Healthy ecosystems, rich with biodiversity, are essential to human existence. They clean air, purify water, ensure availability of nutritious foods, nature-based medicines & raw materials, and reduce the occurrence of disasters.
- However, 1 million plant & animal species are facing extinction. Every species plays an important role in keeping an ecosystem balanced and healthy. Losses in biodiversity increases spread of infectious diseases.



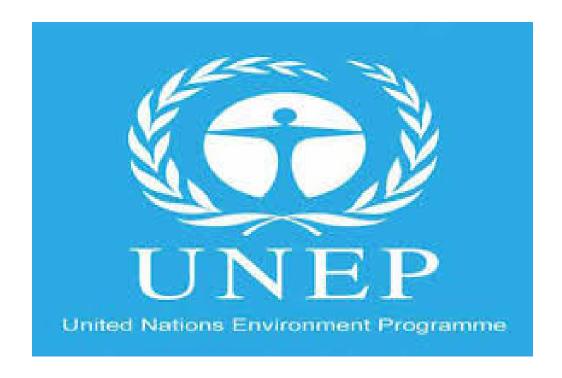
Loss of Biodiversity – Major Factors

- LAND-USE CHANGE e.g. Agriculture, Animal grazing, Top soil degradation & other Human developmental activities.
- OVEREXPLOITATION Of PLANTS & ANIMALS e.g. fishing, logging, wildlife poaching, encroachment, fuels etc.
- CLIMATE CHANGE e.g. sea warming, ice melting, coral reef bleaching has threatened 16% species to extinction.
- POLLUTION e.g. macro & microplastic in ocean threatens the marine biodiversity, waste dumps, pesticides, fertilizers & chemicals harm pollinators like bees & bats, which are natural predators of pests.
- INVASIVE ALIEN SPECIES act as parasites or competitors, altering habitats, crossbreeding with local species and bringing diseases. Globalisation has increased disruption.



Biodiversity and COVID19 Pandemic

- Coronaviruses are 'Zoonotic' meaning they are transmitted between animals and people e.g. the SARS was transmitted from civet cats to humans, and the MERS passed from dromedary camels to humans. Other examples include Ebola, bird flu, Rift Valley fever, West Nile virus and Zika virus disease.
- Habitat loss and fragmentation, illegal trade, pollution, invasive species and climate change are threats to ecosystems and wildlife. These encourage more rapid evolutionary processes and diversification of diseases causing emergence of zoonoses i.e. easy spread of pathogens to livestock and humans.











Appeal to Individuals

- Leave some wild green spaces in your garden where pollinators and ground dwelling insects can thrive.
- Avoid buying single-use plastics. Dispose plastic waste responsibly. For many species, it can cause severe injury and death.
- Recycle waste as much as you can.
- Plant an urban 'Miyawaki' garden in your neighbourhood.
- Minimize use of household chemicals, they may have toxic effects on soil and groundwater. Instead, try natural products, like vinegar and plain soap etc.
- Create a compost in your home and grow own produce.
- Explore & buy locally produced products and foods.



Appeal to Industries & Businesses

- Announce a new initiative, target or transformational action that will improve your environmental footprint.
- Declare the removal of single-use plastic in your business operations and supply chains.
- Transform investments and operations to generate no net loss and positive gain in biodiversity.
- Incorporate sustainability concerns at the earliest stages of planning.
- Consider options that optimize resource use, minimize greenhouse gas emissions and avoid harmful chemicals that hurt biodiversity.
- Plant an urban 'Miyawaki' garden in your neighbourhood.

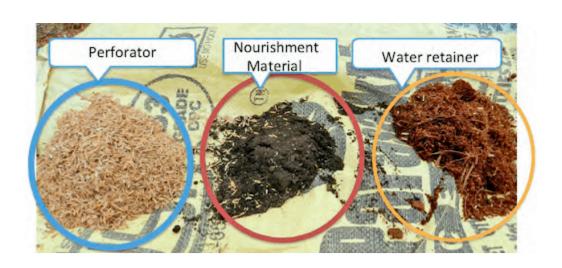


- Miyawaki is a technique pioneered by Japanese botanist Akira Miyawaki, that helps build dense, native forests.
- In this method, plant growth is 10 times faster and the resulting plantation is 30 times denser than usual.
- It involves planting native species, and becomes maintenance-free after 3 years.
- Miyawaki mini forests can be created in small urban spaces, as small as 30 square feet.
- Such forest supports plant & animal biodiversity greatly.

Step 1: Determine the soil texture and quantify biomass

If needed add a) Perforator material, b) Water retainer,c) Organic fertiliser d) Mulch







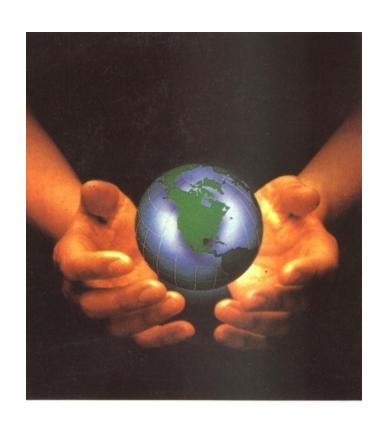
Select plants that grow up to different levels

- **Step 2:** Select tree species for plantation
- Major Forest Species: Choose 5 different species, this will constitute 40 to 50% nos of trees in the forest.
- Supporting species: Other common species of the area will constitute 25 to 40% percent, and minor native species will make up the rest.
- **Step 3:** Design the forest e.g. Master Plan, Watering Plan, Planning Project Execution (material/sapling/equipment)
- **Step 4:** Preparing the area
- **Step 5:** Plant the trees
- **Step 6:** Take care for 3 yrs (Monitoring & Maintenance)



A full-grown Miyawaki forest





THANK YOU

M.M. KULKARNI

Environment Knowledge Centre

Flat 1, Thakkar Retreat, Bldg-I, Old Naka, Gangapur Road, Nashik – 422 013

Pune Office

207, Nyati Emporius, Next to Mercedes-Benz Showroom, Mumbai-Bangalore Highway, Baner, Pune – 411 045