World Enviornment Day

UN environment programme

Puducherry ENVIS HUB

Host Centre: Puducherry Pollution Control Committee

Funded by Ministry of Environment, Forest & Climate Change
Government of India, New Delhi

World ENVIRONMENT Day

5th June, 2021

Theme: "Ecosystem Restoration"

UNITED NATIONS DECADE ON ECOSYSTEM RESTORATION 2021-2030

#Reimagine #Recreate #Restore

ENVIS Puducherry | envishubpdy/ | ENVIS HUB - Puducherry | @envispuducherry

In 1972, the UN General Assembly designated 5 June as World Environment Day (WED). The first celebration, under the slogan "Only One Earth" took place in 1974. In the following years, WED has developed as a platform to raise awareness on the problems facing our environment such as air pollution, plastic pollution, illegal wildlife trade, sustainable consumption, sea-level increase, and food security, among others. Furthermore, WED helps drive change in consumption patterns and in national and international environmental policy.

2021 Theme: Ecosystem Restoration

The theme for World Environment Day 2021 is "Ecosystem Restoration" and will see the launch of the UN Decade on Ecosystem Restoration. Ecosystem restoration can take many forms: Growing trees, greening cities, rewilding gardens, changing diets or cleaning up rivers and coasts. This is the generation that can make peace with nature.

What is Ecosystem Restoration?

Ecosystem restoration means assisting in the recovery of ecosystems that have been degraded or destroyed, as well as conserving the ecosystems that are still intact. Healthier ecosystems, with richer biodiversity, yield greater benefits such as more fertile soils, bigger yields of timber and fish, and larger stores of greenhouse gases.

Restoration can happen in many ways – for example through actively planting or by removing pressures so that nature can recover on its own. It is not always possible – or desirable – to return an ecosystem to its original state. We still need farmland and infrastructure on land that was once forest, for instance, and ecosystems, like societies, need to adapt to a changing climate.

All kinds of ecosystems can be restored, including forests, farmlands, cities, wetlands and oceans. Restoration initiatives can be launched by almost anyone, from governments and development agencies to businesses, communities and individuals. That is because the causes of degradation are many and varied, and can have an impact at different scales.

Take Action By:

- Announcing an ambitious restoration project or policy initiative, whether at local, regional or national level
- Volunteering for an existing restoration effort.
- Cleaning up a lake, beach, park or other natural area.
- Greening your home, business, school, or a public space with indigenous trees or plants.
- Join an ecosystem restoration camp. It is a great way to give back to the planet and make a positive impact in your local region.

Raise Your Voice By:

- Putting on or participating in an exhibition of posters, photos or art showing the beauty of local ecosystems.
- Holding a discussion about the value of ecosystems and the threats they face.
- Writing a letter to your local newspaper.

Whatever you do, celebrate the moment and spread the word! Take pictures of your World Environment Day activities and post them on social media with the tag #GenerationRestoration and #WorldEnvironmentDay to maximize your contribution to the restoration movement.

Ecosystem by Ecosystem - What Restoration Can Look Like

Reimagine.
Recreate.
Restore.

This is our moment. We cannot turn back time. But we can grow trees, green our cities, rewild our gardens, change our diets and clean up rivers and coasts. We are the generation that can make peace with nature. Let's get active, not anxious. Let's be bold, not timid.

Forests and Trees

Forests and trees provide us with clean air and water, capture vast amounts of climate-heating carbon and are home to most of Earth's biodiversity. They supply food and fodder, fuel and materials, and support the livelihoods of billions of people.

- ✓ **Plant trees:** Tree planting is a simple and hugely popular restoration activity. You can add trees to a garden, a public space, a farm, across a landscape or even a whole country. Selective planting can revitalize a forest degraded by overharvesting.
- ✓ **Assist natural regeneration:** This low-cost restoration strategy involves creating the conditions for indigenous trees to germinate or re-sprout naturally.
- ✓ **Forest landscape restoration:** Well-resourced projects can secure bigger restoration gains by looking at a whole landscape.

Rivers and Lakes

Freshwater ecosystems supply food, water and energy to billions of people, protect us from droughts and floods, and provide unique habitat for many plants and animals, including one-third of all vertebrate species.

- **Clean it up:** Gather up all the trash and junk dumped or washed up so that people appreciate the landscape and take better care of it.
- **Regulate access:** Create agreed and easy-to-use access points, for instance for animals to drink, boats to land, or people to swim and relax. This will spare fragile vegetation, bird habitat and fish spawning grounds and reduce erosion at the water's edge.
- **Restore vegetation:** Plant indigenous species to restore rich habitats along the banks of rivers and lakes, create wildlife corridors, and create a buffer zone between the water and sources of pollution, such as nearby industries or farms; remove invasive alien species.
- **Plan sustainably:** Develop fishing and harvesting plans that don't deplete the water, fish or other resources. Reduce and treat sewage, stop chemical pollutants, industrial waste or other effluent entering the water. Strike agreements or pay incentives to reduce the use of agricultural chemicals on adjacent land.
- **Protect and restore nature:** On a landscape scale, seek wide agreement on the declaration of important freshwater ecosystems as protected areas. Remove dams or other infrastructure that are no longer needed and restore natural river flow. And campaign to keep residential development, dredging or mining out of sensitive areas.

Towns and Cities

Urban areas occupy less than 1 per cent of the Earth's land surface but house more than half of its people. Despite their steel and concrete, crowds and traffic, cities and towns are still ecosystems whose condition profoundly marks the quality of our lives. Functioning urban ecosystems help clean our air and water, cool urban heat islands, shield us from hazards and provide opportunities for rest and play. They can also host a surprising amount of biodiversity.

- **Green public spaces:** Design and support initiatives to restore waterways and wetlands, plant indigenous trees, and create urban woodland and other wildlife habitats along roads and railways and in public spaces. Get local businesses to help with funding and expertise. Sometimes, the best efforts come for free: Rewilding public spaces by mowing grass and cutting down plants attracts insects, birds, butterflies and even mammals to return to the city.

- **Citizens for sustainability:** Campaign for sustainable urban planning, including the restoration of disused or contaminated sites, the inclusion of green spaces in new housing developments, and strong public transport networks. Faced with climate change, more citizens get involved in "adopt-a-tree" initiatives that help ensure trees – especially the young ones with shallow roots – are watered during dry spells. Digital tools, like apps, can support these efforts by tracking and coordinating individual contributions.

- **One micro-ecosystem at a time:** Manage your own garden, yard, business premises or school, however big or small they are, in ways that boost nature, or care for a roadside tree. Plant indigenous species, start dense urban micro-forests and make compost.

Oceans and Coasts

Oceans and seas cover more than 70 per cent of the Earth. These ecosystems regulate our climate and generate most of the oxygen we breathe. They underpin key economic sectors, such as tourism and fisheries. And they harbor biodiversity from, whales to plankton, in habitats from sun-lit reefs to polar oceans.

- **Clean up:** Mobilize all ages to gather the masses of household waste and abandoned fishing gear that wash up on our beaches and shores. Recycle plastics and other materials to keep them out of landfill. Stop using avoidable and unnecessary plastic products. Watch out for microbeads and microplastics hidden in products! The more people take part, the more awareness grows of the need to reduce waste and dispose of it properly.

- **Restore vegetation above and below the water:** Protect and restore coastal ecosystems including saltmarshes, mangroves, coral reefs, sea-grass meadows and shellfish beds to boost their diversity and the habitats and benefits they provide. All ecosystems are complex, so get expert advice for your location.

- **Use the ocean wisely:** Bring together communities, authorities and other stakeholders to agree how to make coastal and ocean development and fishing sustainable, for instance by creating protected areas and deciding who can access which resources. If fishing communities come together and jointly decide on protected areas and fishing zones in their waters, people and nature benefit.

Farmlands and Grasslands

Farmlands and grasslands are perhaps our most vital ecosystems. As well as supplying food, fodder, and fibre, arable fields and grazing land host a bewildering variety of organisms from bats and birds to beetles and worms as well as considerable tree cover. Marked by centuries of human effort and ingenuity, these ecosystems are cultural treasures whose protection makes spiritual as well as economic sense.

- ✓ **Invest in nature:** Reduce tillage and use natural pest control and organic fertilizer on arable land to build the health of your soil and the yields of your crops while reducing erosion and the need for farm chemicals.
- ✓ **Trust in diversity:** Grow more trees and a greater variety of crops and integrate them with livestock keeping to further boost soil health, diversify your income and provide better wildlife habitat. Planting flowers along the borders of farmlands can provide valuable "feeding stations" for bees and other pollinators.
- ✓ **Keep grasslands whole:** In extensive grasslands and savannahs, protect areas along rivers where nutrients are high from being converted to cropland. Without them, less productive areas are harder to use sustainably.
- ✓ **Graze sustainably:** Agree on grazing regimes that prevent overuse, soil erosion and invasions of grasslands by shrubs and alien species. Restore already degraded areas by clearing woody vegetation and re-seeding native grasses.
- ✓ **Bring back indigenous species:** Reintroduce eradicated plants, trees and animals and protect them from predation and hunting until they are established.

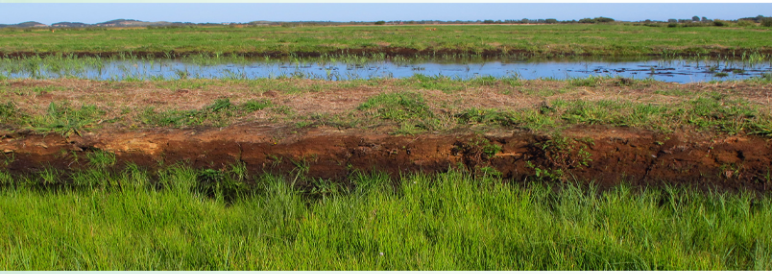
Mountains

Mountains harbor most of Earth's biodiversity hotspots and supply fresh water to an estimated half of humanity. They include a multitude of ecosystems providing a home to unique species, such as snow leopards and mountain gorillas, as well as great cultural diversity among people adapted to the challenges of mountain life.

- ✓ **Restore forest shields:** Restore and replant forests and trees to protect soil, safeguard water flows and guard against natural disasters, such as avalanches, landslides and floods.
- ✓ **Limit extraction and excavation:** Our hunger for resources can have catastrophic consequences for mountains and hillsides. Make sure that landscapes are restored after mining operations have ended.
- ✓ **Let ecosystems migrate:** Create or connect protected areas covering different altitudes so that species and ecosystems can migrate according to the shifting climate.
- ✓ **Farm for resilience:** Promote and adopt sustainable farming techniques, such as agroforestry, that restore soils and biodiversity and can be more resilient in the face of climate change and extreme weather.
- ✓ **Learn from experience:** Tap local and indigenous knowledge to keep the use of natural resources sustainable.

Peatlands

Though they cover only 3 per cent of the world's land, peatlands store nearly 30 per cent of its soil carbon. They control water supplies and prevent floods and droughts and provide many people with food and fuel. They also house plants and animals unique to these watery environments.



- **Protect peatlands:** Include these sensitive ecosystems in protected areas to prevent their drainage, conversion and overuse.
- **Dam the drains:** Keep peatlands healthy by closing drainage channels and slowing water flows, for example by putting rocks in ditches and streams and growing trees along their banks.
- **Accelerate recovery:** Plant and seed peatland plant species, such as native grasses and mosses, to boost their natural regeneration.
- **Limit pressures:** Outside protected areas, work with stakeholders to establish sustainable use of peatlands, for instance as extensive grazing lands. Promote alternative energy sources to reduce demand for peat as a fuel.

INVESTING IN ECOSYSTEMS IS INVESTING IN OUR FUTURE

Calls for urgent action to revive our damaged ecosystems.

From forests to peatlands to coasts, we all depend on healthy ecosystems for our survival. Ecosystems are defined as the interaction between living organisms - plants, animals, people - with their surroundings. This includes nature, but also human-made systems such as cities or farms.

Ecosystem restoration is a global undertaking at massive scale. It means repairing billions of hectares of land – so that people have access to food, clean water and jobs.

It means bringing back plants and animals from the brink of extinction, from the peaks of mountains to the depths of the sea.

But it also includes the many small actions everyone can take, every day: growing trees, greening our cities, rewilding our gardens or cleaning up trash alongside rivers and coasts.

Restoring ecosystems carries substantial benefits for people. For every dollar invested in restoration, at least seven to thirty dollars in returns for society can be expected. Restoration also creates jobs in rural areas where they are most needed.

Some countries have already invested in restoration as part of their strategies to bounce back from COVID-19. Others are turning to restoration to help them adapt to a climate that is already changing.

Contact Us :

envis.pon@nic.in 0413 - 2201256 https://dste.py.gov.in/Envispdy/