



Green Alert



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Eco-Product

The focus of Environment Information System (ENVIS) is to disseminate environmental information to decision makers, policy planners, scientists and researchers across the world.

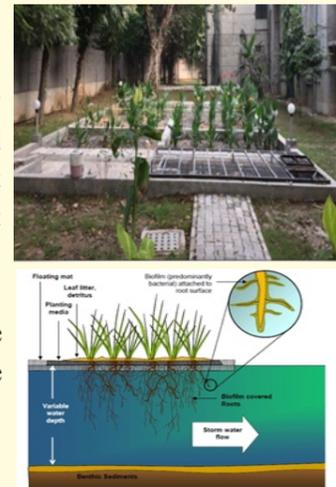
The CERC-ENVIS Resource Partner focuses on 'Environment Literacy - Eco-labelling and Eco-friendly Products' This bi-monthly e-bulletin features latest news, developments and innovations in the field.

Green Issue

Green Technology

Lakes and other wetlands have high organic load due to the release of sewage drainage in open. This high nutrient content causes eutrophication and algal bloom which eventually kills the lake. Phytorid is a self-sustainable technology, an eco-friendly and cost-effective technology for wastewater treatment developed by CSIR-NEERI. It is a subsurface mixed flow constructed wetland system that works on the principle of natural wetland. It uses certain specific plants that can absorb nutrients directly from wastewater but do not require soil. These plants act as nutrient sinker and remover. Another technology that uses wetland plants i.e. floating rafters that floats on the water body continuously. The roots of the plants decompose organic matter present in the sewage. Excessive nutrients gets absorbed and the growth of plants and algae in the lake can be prevented. Using both the technologies i.e. Phytorid treatment and floating rafters can treat the lake water in terms of Biological Oxygen Demand and Suspended Solids.

Source: <https://bit.ly/2U4J7K9> <https://bit.ly/2U4J3dn>



Ecosystem

Every year on June 5th falls the World Environment Day, this year with the theme of "Reimagine. Recreate. Restore" focusing on Ecosystem Restoration. Every three seconds, the world loses enough forest to cover a football pitch, half of the wetlands has been destroyed over the last century and global greenhouse emissions has been increasing continuously. Ecosystem loss is depriving the world of carbon sinks, like forests and peatlands, at a time humanity can least afford it. Over 4.7 million hectares of forests – an area larger than Denmark are lost every year. Nearly 80 per cent of the world's wastewater is discharged to our oceans and rivers without treatment. Wetlands are being drained for agriculture, with some 87 per cent lost globally in the last 300 years. The seven wonders of ecosystem are Peatland, Desserts, Mountains, Seas, Reefs, Forests & Savanah. Below are the descriptions of these ecosystems and its importance in mitigating climate change. In the face of climate change and destructive human activities like overfishing and pollution, it is important to understand the interconnectedness of organisms in an ecosystem and how restoring these balanced systems can benefit all life on Earth.

Peatland Ecosystem

More than 180 countries are home to a special type of wetland called 'Peatland' that are vital super powered ecosystems. Though they cover only 3 per cent of the world's land, they store nearly 30 per cent of its soil carbon. Peat is decaying organic matter - dead plants that haven't completely rotted yet- that may have formed over thousands of years. These peatland ecosystems play an unmatched role in regulating our climate, storing twice as much carbon as all the world's forests combined. But carbon is not all that peatlands have in store.

Dessert Ecosystem

Desserts are ecosystem with very little rain. Desserts are more than a barren image. They are home abundance of wildlife, ancient customs and traditions. The main 3 dessert ecosystems in the world are Gobi Desert- Central Asia, Wadi Rum-Jordan and Sahara Dessert- Northern Africa.

Mountains

Mountains are large landforms formed by tectonic activity that makes up around 25% of Earth's land area and are home to more than 85% of the world's species of amphibians, birds, and mammals, many of which cannot be found anywhere else in the world. They provide freshwater needs to the half of the humanity. The majestic mountain ranges around the globe includes Carpathian Mountains - Central & Easter Europe, Hindu Kush Himalaya Mountain Range- South Central Asia, Tian Shan Mountains- Northern China, Virunga Mountains- East Africa.

Reef Ecosystem

Coral Reef Ecosystem also known as 'Rainforests of the Sea' covers only 0.1% of the ocean but they support 25 per cent of its life and the lives of half a billion people on land. Coral reefs are delicately balanced ecosystems in which every character-living and non-living plays a role. While coral reefs may exist under the sea, we harvest resources from the reef like fish and algae in order to eat and create products. Protecting coral reefs means protecting the ocean's variety of life, which in turn means protecting our own lives as well. Coral reefs can be restored in a number of ways, such as placing artificial structures on the ocean floor on which corals can grow, or planting nursery-grown corals back onto the reefs.

Seas

Mangrove Trees are like guardians protecting life on land from the harmful impacts of storms and waves. They are critical habitats for marine species and are important for food security. But they are under serious threat from coastline development, aquaculture, pollution and other human impacts. Sea Grass Meadows are the Day care of the Sea which are spread along the sea floor nursing young, vulnerable marine creatures before they are strong enough to make the big move to reefs and other marine ecosystems. They are critical for food security, and 20% of the world's major fisheries industries depend on healthy seagrass meadows. Though they cover only 0.1 per cent of the ocean floor, these meadows are highly efficient carbon sinks, storing up to 18 per cent of the world's oceanic carbon. Coral reefs also known as cities of the sea are biological hotspots of the ocean. Though it covers only 0.1% of the ocean floor, they are home to 25% of all marine life, and provide us on land with food, life-saving medicines, recreation, livelihoods, and protection from storms. They are one of the most productive and biodiverse ecosystems on our planet

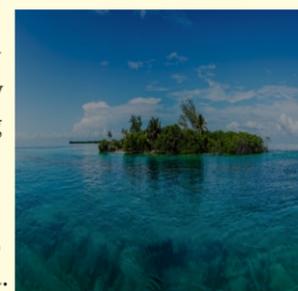
Grasslands

Savannahs in Africa are credited with being the cradle for human evolution. Its home to countless and diverse plant and animal species that make up the Savannah ecosystem. But despite the beauty and wonders of the park, its health and the health of other savannahs are being threatened by the impacts of climate change. Some of the major savannahs around the globe are Serengeti-Tanzania, Northern Australian Savannahs, Brazilian Cerradao.

Forests

Third of the earth is covered with Forests. They might be dry or wet, warm or cold, dense or sparse, but all forests have two things in common- that they are dominated by trees, and that they are vital to life on the planet. Forests provide physical, economic, cultural, and spiritual benefits in its healthy state. And when it is destroyed, not only do these benefits disintegrate, but newfound problems arise. Fires caused by deforestation create haze pollution, Flooding is induced by the elimination of natural watersheds, and landslides are provoked by a sudden lack of trees keeping soil compact.

Source: <https://www.worldenvironmentday.global/>



Eco-Tips

Reimagine to restore and recreate earth.
Let's pledge to rejuvenate and restore the lost ecosystem.

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