# [***India should focus on protecting its existing mangroves***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:67X5-CV01-JDKC-R433-00000-00&context=1516831)

Down To Earth

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**Body**

India, March 31 -- An alarming 50 per cent of the world's ***mangrove*** forests have disappeared in the last five decades due to coastal developments

Finance minister Nirmala Sitharaman announced a new initiative for planting ***mangroves*** along the coastlines and on saltpans of India in her Budget speech this year. The ***Mangrove*** Initiative for Shoreline Habitats and Tangible Incomes (MISHTI) comes after India joined the ***Mangrove*** Alliance for Climate, launched during the 27th Conference of Parties to the United Nations Framework Convention on Climate Change held in Egypt in November 2022.

Also read: Budget 2023-24: Experts hail Centre's ***mangrove*** restoration scheme but stress on scientific implementation

An alarming 50 per cent of the world's ***mangrove*** forests have disappeared in the last five decades due to coastal developments, including climate change, logging and agriculture, according to the International Union for Conservation of Nature .

Present in the lowlands of intertidal zones in most tropical and sub-tropical countries, ***mangroves*** act as the first line of defence during cyclones by preventing large-scale structural, ecological and livelihood damages. They are particularly efficient in absorbing carbon dioxide from the atmosphere and are home to vital species in the ***blue carbon*** ecosystem and help prevent coastal erosion.

The Sundarbans, which cover 60 per cent of the area in Bangladesh and the remaining in West Bengal, are the largest continuous tracts of ***mangroves*** in the world.

Some three per cent of the ***mangroves*** in the world are found in India, accounting for more than 43-45 ***mangrove*** species, with the Sundarbans having the most area covered by them.

Climate change has caused the Sundarbans to experience a rise in sea levels and a decrease in salinity, which has changed the composition and hydrology of ***mangrove*** species, rendering further planting of ***mangroves*** along the coast ineffective (survival rate of less than 70 per cent).

Also read: Climate change: Why we can't rely on regrowing coastal habitats to offset carbon emissions

***Mangroves*** are regarded as great sinks for carbon sequestration. In the case of ***mangroves***, above-ground and below-ground biomass needs to be calculated to evaluate the amount of carbon sequestered.

***Mangroves*** in India

In the Indian context, regional evaluation across the carbon stocks has not been done. More importantly, carbon sequestration results from the constant addition of organic material into the soil, which is kept intact with the entwining of ***mangrove*** roots and their pneumatophores. Incidentally, these are where most plastic wastes accumulate and can lead to the suffocation of these roots.

Having tackled several such climate disasters in the past, Rotary Clubs in India closely work at district and state levels to build climate resilience.

An analysis of a successful ***mangrove*** restoration model in Estuarine, Coastal and Shelf Science journal highlights two case studies, one in the urban coastal port of Mundra in Gujarat's Kachchh district and the second in a coastal rural area in Surat district. The two case studies indicate that concerted efforts and collaboration between government agencies, local communities and the private sector could pave the way for ***mangrove*** restoration in India.

India is on course to devise a unique biodiversity conservation model through a holistic approach. The government has rolled out the MISHTI scheme as part of this effort.

Climate change-induced sea level rise, tornadoes and cyclones have been impacting the lives and livelihoods of communities living around coastal ecosystems. ***Mangroves*** are considered the best defenders of tropical coastal communities that suffer the most during such disasters.

Rotary Clubs in India encourage their members across the world to restore ***mangroves*** on a war footing. In India, they have been creating Miyawaki forests in various states. But it takes at least 40 years for these forests to sequester carbon. On the other hand, restoring ***mangroves*** will yield result in three years.

Also read: Plant 50 million ***mangroves*** in the Sundarbans? Improbable, say experts

It is more effective to restore existing ***mangrove*** habitats than to begin planting and establishing nurseries on newly constructed islands and along the shore. Protecting the present ***mangrove*** cover on the property increases the likelihood of preserving carbon sequestration.

Science tells us that if we are to prevent a climate catastrophe, planned efforts are required to save the planet. We can bring changes by applying the Sundarbans model to Odisha, Kutch, Maharashtra, Tamil Nadu, and Kerala. There is hope that things can change if we all work together to save the environment. It's not too late to slow the pace of climate change as long as we act today.

Read more:

\* Locals oppose petrochemical project plan in Odisha's Kendrapara over green concerns

\* Cyclone Yaas: Where are the 50 million ***mangroves*** gone, asks Mamata?

Views expressed are the author's own and don't necessarily reflect those of Down To Earth

***mangrove*** Sundarbans West Carbon Intensity nasa map on ***mangroves*** carbon emission Global Warming Forests India

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