















Report

on

International Day for the Conservation of the Mangrove Ecosystem 2023



Organized by

EIACP Programme Centre Resource Partner on
Forest Genetic Resources and Tree Improvement
ICFRE - Institute of Forest Genetics and Tree Breeding
(Indian Council of Forestry Research and Education)
Coimbatore - 641 002

International Mangrove Day 2023 Celebrations by ICFRE-IFGTB EIAPC PC RP

As part of Azadi Ka Amrit Mahotsav (AKAM), Ek Bharat Shreshtha Bharat (EBSB) and Mission LiFE, EIACP (Environmental Information, Awareness, Capacity Building and Livelihood Programme) Programme Centre (erstwhile IFGTB ENVIS) RP at the ICFRE - Institute of Forest Genetics and Tree Breeding, Coimbatore organized an awareness event on 26.07.2023 to commemorate International Day for the Conservation of the Mangrove Ecosystem 2023. The main aim of this event was to raise awareness about the significance of mangrove ecosystems and to promote solutions for their sustainable management and conservation.

The event began with Prakruthi Vandanam, an invocation on nature in Sanskrit based on Yajur Veda composed by Dr Kannan CS Warrier, Scientist F and EIACP Coordinator. During his awareness lecture, Dr Warrier explained that as per Global Forest Resource Assessment, 2020, world over, 113 countries have Mangrove forests covering an estimated 14.79 million hectares. Mangrove cover in India at present is 4992 sq km which is 0.15 % of total geographical area of the country. The States that show significant gain in Mangrove cover are Odisha and Maharashtra followed by West Bengal and Karnataka. In Tamil Nadu and Kerala, the Mangrove cover is 45 and 9 sq km respectively and there is no change in the Mangrove cover in these States over the previous assessment in 2019. Sunderban is the world's largest single patch of Mangrove forests and it is the first Mangrove forest in the world which was brought under scientific management as early as in 1892. Mangroves are repositories of rich biodiversity, he added. Dr Warrier highlighted that in most countries, Mangrove ecosystems face constant pressure due to increasing human population in coastal areas and for the rising demand for land, timber, fodder, fuel-wood and other non-wood forest products. Appropriate management regimes are germane to effective conservation of Mangroves.

During her special address, Dr. Yasodha brought attention to the immense significance of mangrove forests, which stand as one of the planet's most productive and biologically diverse ecosystems. Undeniably crucial to human well-being, these unique environments play a vital role in providing essential life necessities such as food, shelter, and livelihoods. One of the notable benefits of mangroves is their ability to act as a protective barrier, reducing property loss and increasing the resilience of local communities against various natural threats. Furthermore, they play a crucial role in combating climate change. Mangrove forests have the remarkable capacity to capture substantial amounts of carbon dioxide from the atmosphere and securely store them within their plant parts and soils. However, despite their immense value, mangroves face the threat of habitat loss and degradation. Dr. Yasodha passionately called for collective action to conserve and restore these invaluable ecosystems. Joining hands in this endeavour is essential to safeguarding this precious and irreplaceable ecosystem for the well-being of both humanity and the planet.

Dr C. Kunhikannan inaugurated the event, during his inaugural address, the Director emphasized the significance of celebrating this day as a means to raise awareness about the remarkable value and vulnerability of mangroves as a unique ecosystem. He highlighted that mangrove forests play a crucial role in nurturing estuaries and supporting nature-based economies. These ecosystems extend their influence beyond their immediate surroundings, as their dense roots effectively bind and enrich

soil, while their above-ground roots help reduce water flow and facilitate sediment accumulation, thereby mitigating coastal erosion. Furthermore, Dr. Kunhikannan stressed the importance of mangroves in offering coastline protection and minimizing the impact of natural disasters. He described mangrove forests as magical environments that hold the secrets of nature, acting as a bridge between land and sea, and fostering the connection between nature and humanity. Addressing the concerning issue of mangrove habitat loss, Dr. Kunhikannan urged everyone to unite in the cause of conserving and restoring these invaluable ecosystems.

As part of this commemoration, an awareness quiz was conducted from 10.07.2023 to 25.07.2023, in which people from different walks of life participated. E certificates were awarded to all of them. An awareness poster highlighting the significance of mangroves was also released during the occasion. Copies of the awareness poster and handouts were distributed to students and the general public and also the softcopies were electronically transmitted to various stakeholders. Students and scholars of Botany Department from Kongunadu Arts and Science College, Coimbatore, Scientists and interns attended the awareness event. In addition, an awareness lecture on LiFE Mission was delivered to the students and visit to various laboratories, Fischer Herbarium and Gass Forest Museum were also organized for the students. Dr S Vigneswaran, Senior Programme Officer, EIACP proposed the vote of thanks.

































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INTERNATIONAL DAY FOR THE CONSERVATION OF THE MANGROVE ECOSYSTEM - 2

The mangrove ecosystem is of immense significance due to its multifaceted contributions to the environment and human well-being. These coastal habitats play a vital role in maintaining biodiversity by providing shelter and breeding grounds for a wide array of plant and animal species. Beyond biodiversity, they serve as a natural shield, protecting coastal areas from the ravages of storms and tidal surges, while also helping to regulate the climate by acting as carbon sinks. Moreover, mangroves enhance water quality by filtering pollutants and sediments, support fisheries and livelihoods for coastal communities, and offer opportunities for eco-tourism and recreation. Preserving these precious ecosystems through conservation efforts is imperative, ensuring their sustained benefits for both nature and humanity.

WHY MANGROVES MATTER

Mangroves are unsung heroes that provide immeasurable benefits, from their role in fisheries to climate change mitigation.

#SaveTheMangroves

Provide natural coastal protection & breakwater

Capture and store carbon dioxide and other greenhouse gases

Branches and roots provide habitat, roosting, and nesting grounds to wildlife

Provide spawning and nursery grounds for juvenile marine species, and nurseries for commercial fish stocks

Tree roots filter nitrate. phosphate, and pollutants from the water, improving the water quality

Root systems slow down water flow, control erosion, and stabilize coastlines

Mangroves provide livelihood and support to local fishers and coastal communities

Offer recreation and tourism benefits from boat tours, kayaking, and boardwalks

Sources: IUCN, www.iucn.org; The Nature Conservancy, www.nature.org