



Report
on
the Observance of

International Day for the Conservation of
the Mangrove Ecosystem - 2020

Organized by

ENVIS Resource Partner

on

Forest Genetic Resources and Tree Improvement
Institute of Forest Genetics and Tree Breeding
(Indian Council of Forestry Research and Education)
Coimbatore

Observance of International Day for the Conservation of the Mangrove Ecosystem by IFGTB ENVIS

The ENVIS Resource Partner on Forest Genetic Resources and Tree Improvement at the Institute of Forest Genetics and Tree Breeding, Coimbatore commemorated **International Day for the Conservation of the Mangrove Ecosystem** on **27.07.2020**. The main aim of this event was to raise awareness about the importance of mangrove ecosystems and to promote solutions for their sustainable management and conservation following the mandatory protocols to contain the spread of COVID 19.

Dr C Kunhikannan, Director, IFGTB during his inaugural address, explained how mangrove contributes to the wellbeing, food security and protection of coastal communities worldwide. They harbour a rich biodiversity and support a number of threatened and endangered species in addition to commercially important species. Mangroves also provide a valuable nursery habitat for fish and crustaceans, he added. It is essential to plant more mangrove species and increase their density, Dr Kunhikannan explained.

Dr Kannan CS Warriar, Scientist F and ENVIS Coordinator spoke on the role of mangroves as effective carbon sinks, sequestering vast amounts of carbon. Carbon emissions from mangrove deforestation account for up to 10% of emissions from the deforestation globally despite covering just 0.7% of land coverage. Mangroves also act as a form of natural coastal defence against storm surges, tsunamis, rising sea levels and erosion, he explained. He also highlighted that, in a recent research, mangrove forests were found to provide ecosystem services (benefits to humans) valued at \$194,000 per hectare annually. However, mangroves vanish 3 to 5 times faster than global forest declines with major environmental and socio-economic impacts. And since 1990, the area of mangroves has decreased by 1.04 million hectares. Quoting the recent statistics of Forest Survey of India, he pointed out that the mangrove cover has increased by 54 sq km in India during 2017 to 2019. Among the 12 major mangrove habitats in India, the positive trend could be observed in the states of Gujarat (37 sq km), Maharashtra (16 sq km) and Odisha (8 sq km) and the marginal decline was reported in Tamil Nadu (-4 sq km), West Bengal (-2 sq km) and Andaman and Nicobar Islands (-1 sq km). Though Tamil Nadu lost, 4 sq km of mangroves, the State recorded an increase in the forest cover to the tune of 83 sq km that is a marginal increase of 0.32% over 2017, he observed. Participatory forest management practices like developing locally-led communities for the protection and conservation of mangroves is the need of the hour.

An awareness poster signifying the status, contributions and conservation of mangroves was released during the occasion and was electronically transmitted to students and stakeholders.







ENVIS Resource Partner on Forest Genetic Resources and Tree Improvement
Institute of Forest Genetics and Tree Breeding
 Ministry of Environment, Forest and Climate Change (Indian Council of Forestry Research & Education)
 P.B.No. 1061, Forest Campus, R.S.Puram PO, Coimbatore - 641 002

International Day for the Conservation of the Mangrove Ecosystem - 2020

Mangrove Ecosystems - Status, Contributions and Conservation

Did You Know?

- Mangroves are extraordinary ecosystems, located at the interface of land and sea in tropical regions, which offer a considerable array of ecosystem goods and services.

- 113 countries have areas of mangrove forest, totalling an estimated 14.79 million hectares.

5.55 mha

Asia

3.24 mha

Africa

2.57 mha

North & Central America

2.13 mha

South America

1.30 mha

Oceania

- Mangrove forests represent less than 1% of all tropical forests worldwide, and less than 0.4% of the total global forests.
- More than 40% of the total area of mangroves reported in four countries.

19%
Indonesia

9%
Brazil

7%
Nigeria

6%
Mexico

- Mangroves vanish 3 to 5 times faster than global forest declines, with major environmental and socio-economic impacts. Since 1990, the area of mangroves has decreased by 1.04 million hectares.

Their Contributions

Role in Biodiversity

- Contribute to the wellbeing, food security, and protection of coastal communities worldwide.
- Rich in biodiversity, mangroves support complex communities, where thousands of other species interact.
- Mangroves provide a valuable nursery habitat for fish and crustaceans.
- Mangroves act as a food source for wildlife and a source of nectar for honeybees.

Role in Climate Mitigation

- Mangrove ecosystems are highly effective carbon sinks, sequestering vast amounts of carbon within the soil, leaves, branches, roots, etc.
- One hectare of mangrove can store 3,754 tons of carbon; it's the equivalent of taking more than 2,650 cars off the road for one year.
- Carbon emissions from mangrove deforestation account for up to 10% of emissions from deforestation globally, despite covering just 0.7% of land coverage.

As a Natural Coastal Defence

- Mangroves act as a natural coastal defence against storm surges, tsunamis, rising sea levels and erosion.
- Mangroves play an important role in reducing vulnerability to natural hazards and increasing resilience to climate change impacts.
- A 500-meter mangrove strip reduces wave heights by 50 to 99%.

How we can Conserve Mangrove Forests?

- Devising well-balanced coastal land-use plans, such as maintaining sustainable limits in logging and other harvesting activities of its resources.
- Retaining protective mangrove buffers along coastlines and rivers to prevent erosion.
- Plant more and increase their density.
- Avoid destructive shrimp farming.
- Increasing sensibility and sensitivity in eco-tourism.

Largest Mangrove Forests of India



Sundarbans Mangroves, West Bengal



Bhitarkanika Mangroves, Odisha



Pichavaram Mangroves, Tamil Nadu



Godavari - Krishna Mangroves, Andhra Pradesh



Baratang Island Mangroves, Andamans