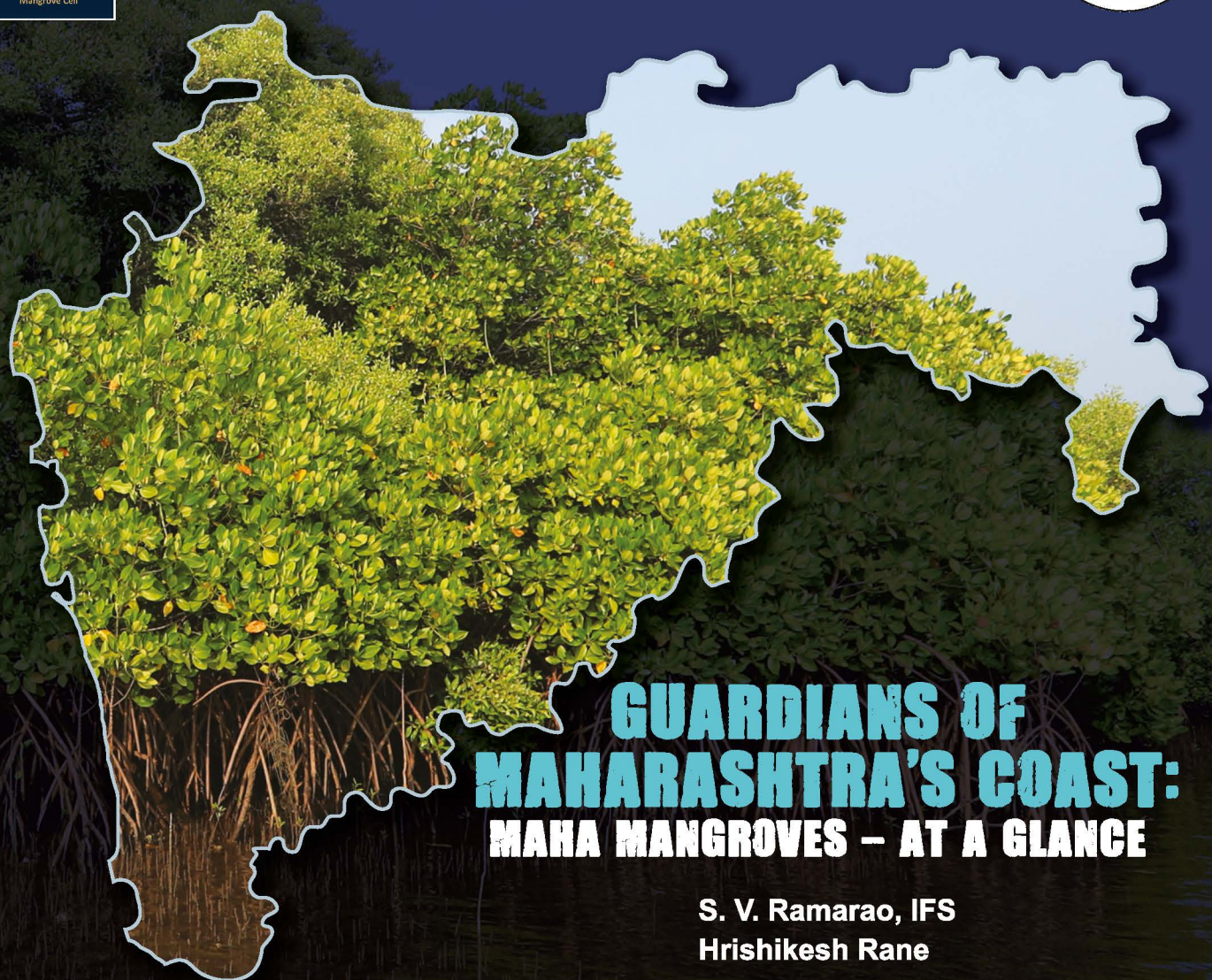
महाराष्ट्र वन विभाग
Mangrove Cell

MANGROVE FOUNDATION



GUARDIANS OF MAHARASHTRA'S COAST:

MAHA MANGROVES – AT A GLANCE

S. V. Ramarao, IFS
Hrishikesh Rane

Dr. Kiran Mali
Dr. Sushant Sanaye
Jayesh Vishwakarma
Kshitija Parkar
Dr. Manas Manjrekar
Dr. Tarnnum Mulla
Prajakta Patil
Dhanashree Bagade

GUARDIANS OF MAHARASHTRA'S COAST:
MAHA MANGROVES – AT A GLANCE

MARCH 2026

S. V. Ramarao, IFS
Hrishikesh Rane

Dr. Kiran Mali
Dr. Sushant Sanaye
Jayesh Vishwakarma
Kshitija Parkar
Dr. Manas Manjrekar
Dr. Tarnnum Mulla
Prajakta Patil
Dhanashree Bagade

AUTHORS

S. V. Ramarao, IFS
Additional Principal Chief Conservator of Forests,
Mangrove Cell and
Executive Director, Mangrove Foundation

Mr. Hrishikesh Rane
Assistant Director - Research & Capacity Building

Dr. Kiran Mali
Deputy Director - Projects & Ecotourism

Dr. Manas Manjrekar
Deputy Director - Research & Capacity Building

Dr. Sushant Sanaye
Deputy Director - Livelihood Development

Dr. Tarnnum Mulla
Assistant Director - Mangrove Ecology

Jayesh Vishwakarma
Assistant Director - Ecotourism

Prajakta Patil
CSR Officer

Kshitija Parkar
Marine Biologist

Dhanashree Bagade
Marine Biologist

IMAGE COURTESY

Cover Photo	Design and Layout	Image Source
Mangrove Foundation photobank	Shardul Kharpude, Spectrum Processes	Mangrove Foundation photobank

©Mangrove and Marine Biodiversity Conservation Foundation of Maharashtra (Mangrove Foundation) 2026 has all rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the Mangrove Foundation.



FOREWORD



Mangroves are rightly called the guardians of our coast. In Maharashtra, these ecosystems play a crucial role in maintaining ecological balance, supporting fisheries, and protecting coastal communities from natural calamities. Recognizing their importance, the State Government has taken proactive measures to conserve and restore mangrove habitats through scientific management, community engagement, and awareness initiatives.

The publication ***"Guardians of Maharashtra's Coast: Maha Mangroves - at a glance"*** presents important insights into the status, conservation initiatives, and achievements of mangrove management in the state. It also showcases the collaborative efforts of government agencies, research institutions, local communities, and environmental organizations in preserving this invaluable natural heritage.

This booklet aims to increase awareness about the ecological significance of mangroves and highlight the progress made in their conservation. It reflects our continued commitment towards sustainable coastal management and biodiversity protection.

I commend the technical experts from Mangrove Foundation for compiling this informative publication and for their consistent work in advancing mangrove conservation in Maharashtra.

I hope this booklet will be informative and encourage greater participation from all sections of society in protecting these vital ecosystems.

S. V. Ramarao, IFS
Additional Principal Chief Conservator of Forests,
Mangrove Cell and
Executive Director, Mangrove Foundation



INTRODUCTION

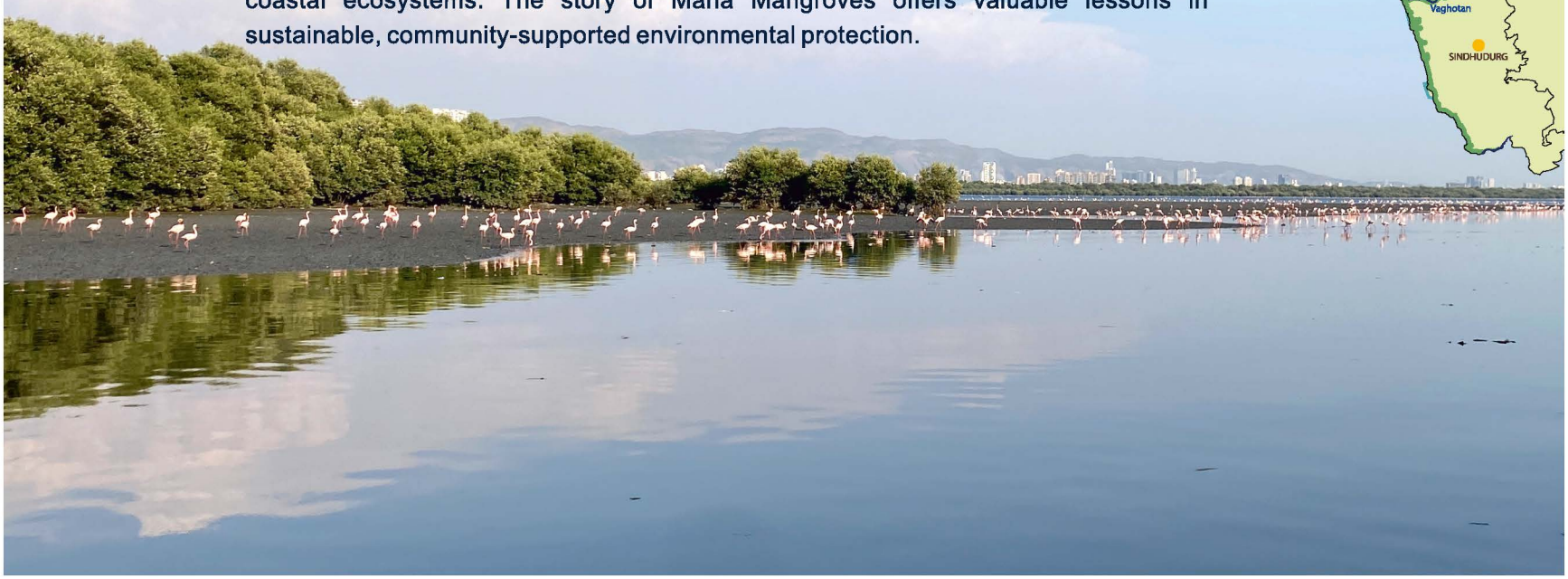
Along the coastal belt of Maharashtra, mangrove forests play a vital role in protecting shorelines and supporting coastal biodiversity. Over the past decade, these ecosystems have shown a notable recovery. According to the India State of Forest Report published by the Forest Survey of India, mangrove cover in Maharashtra increased from 222 sq. km in 2015 to 315.09 sq. km in 2023, reflecting a substantial net gain of 93.09 sq. km.

Of this increase, approximately 20 sq. km is attributed to plantation activities, while the majority of 73 sq. km results from sustained conservation efforts. These efforts include natural regeneration, habitat protection, scientific management, and active community participation spearheaded by the Mangrove Foundation.

This trend has drawn the attention of conservationists and environmental activists, as plantation activities alone do not adequately explain the observed growth.

Mangrove conservation in Maharashtra has been strengthened through Hon'ble High Court directions and robust legal backing, work of NGOs and environmental activists complemented by proactive support from the State Government and effectively implemented through the sustained efforts of the Mangrove Cell and the Mangrove Foundation.

At a time of global concern over mangrove conservation, Maharashtra demonstrates how planned conservation and systematic management can successfully restore coastal ecosystems. The story of Maha Mangroves offers valuable lessons in sustainable, community-supported environmental protection.





WHAT ARE MANGROVES?

Global species **64**

Total species in India **46**

Species found in Maharashtra **18**

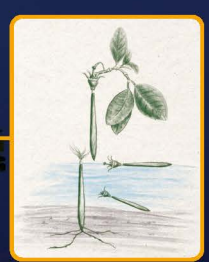
Mangroves are specialised, salt-tolerant forest ecosystems found in coastal intertidal zones, estuaries, creeks, and river mouths. They are uniquely adapted to saline water, soft muddy soils, and tidal fluctuations through specialised root systems such as stilt roots and pneumatophores. Mangroves form dense coastal vegetation and act as a vital ecological link between land and sea. Mangroves are invaluable natural assets, and their sustainable conservation is essential for environmental security and long-term livelihood support.

Adaptations that make mangroves unique

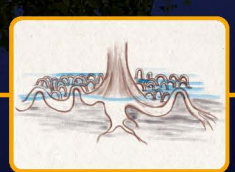
Salt Excretion :
Mangroves adapt to saline conditions by excreting excess salt through specialized salt glands in their leaves.



Seed Adaptation :
Mangroves have seed adaptations like vivipary and cryptovivipary, where seeds grow on the parent plant and form floating propagules that survive in salty, waterlogged conditions.



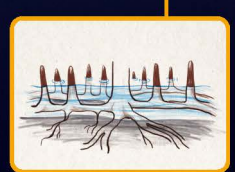
Breathing roots :
A key feature of mangroves is their exposed roots, which provide support in soft soils and help in breathing in saline, waterlogged conditions.



Knee Roots



Stilt Roots



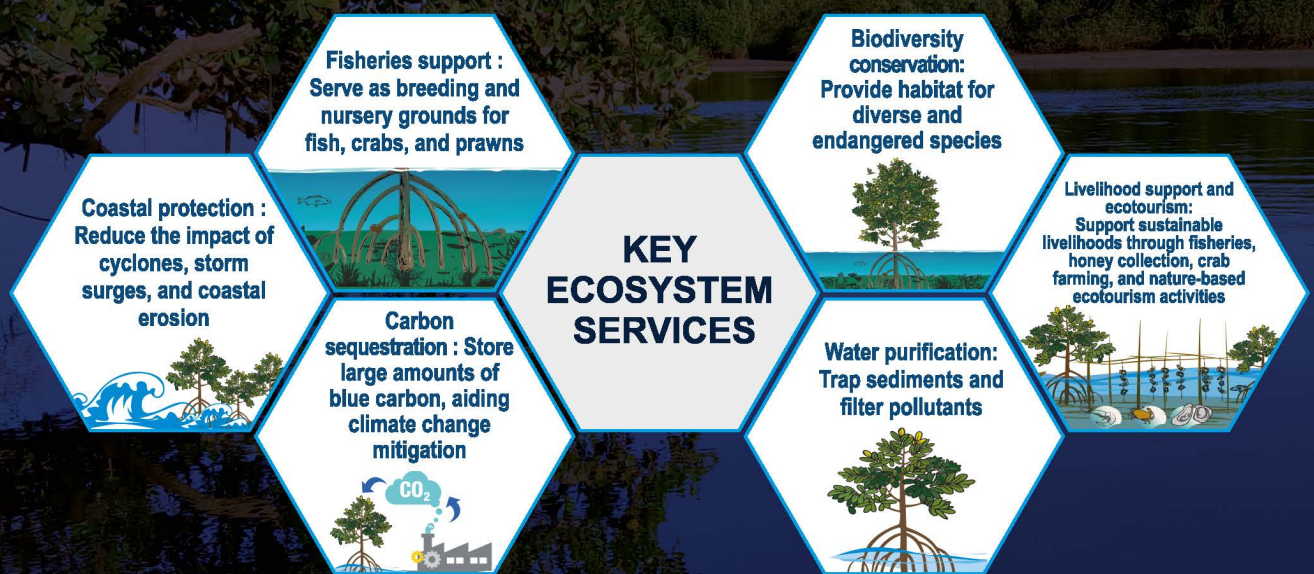
Pneumatophore

18 SPECIES FOUND IN MAHARASHTRA

- *Avicennia marina*
- *Avicennia officinalis*
- *Sonneratia apetala*
- *Sonneratia alba*
- *Sonneratia caseolaris*
- *Rhizophora mucronata*
- *Rhizophora apiculata*
- *Acanthus ilicifolius*
- *Aegiceras corniculatum*
- *Bruguiera cylindrica*
- *Bruguiera gymnorhiza*
- *Ceriops tagal*
- *Excoecaria agallocha*
- *Lumnitzera racemosa*
- *Xylocarpus granatum*
- *Kandelia candel*
- *Heritiera littoralis*
- *Cynometra iripa*

Importance of Mangroves

Mangroves are among the most productive ecosystems in the world. They play a crucial role in coastal protection, biodiversity conservation, climate resilience, and the livelihoods of coastal communities.





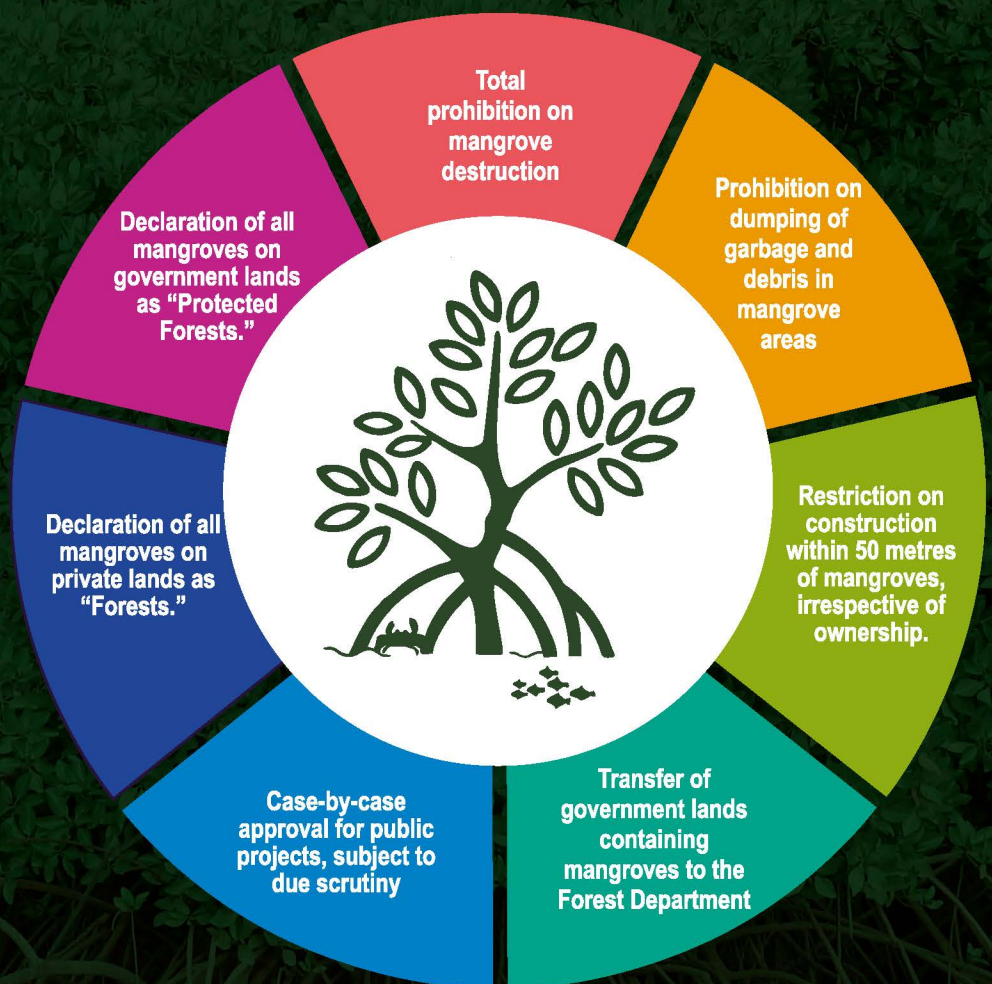
State mangrove tree of Maharashtra



On 20 September 2020, the State Government of Maharashtra declared *Sonneratia alba-a* mangrove species belonging to the Family *Lythraceae* and commonly known as the sweet-scented mangrove apple—as the official state mangrove tree. Maharashtra is the first coastal state in India to take this initiative, aimed at strengthening the conservation and protection of mangrove ecosystem.

HON'BLE HIGH COURT'S DIRECTIONS

A Public Interest Litigation (PIL) No. 87 of 2006 was filed by Bombay Environmental Action Group before the Hon'ble High Court, pursuant to which an interim order was issued in October 2005, followed by a final order in September 2018. The orders, inter alia, provide for the following:



GOVERNMENT INITIATIVES

2012

The Mangrove Cell, established by the Government of Maharashtra under the Forest Department, is responsible for conserving mangrove ecosystems, conducting research on threatened coastal and marine species, and supporting sustainable livelihood initiatives for coastal communities. It is headed by the Additional Principal Chief Conservator of Forests (APCCF)

2013

In response to increasing urban pressures in the Mumbai Metropolitan Region, the Mumbai Mangrove Conservation Unit (MMCU) was constituted under the Mangrove Cell and is headed by a Divisional Forest Officer (DFO).

The State Govt. of Maharashtra decided to elevate the status of mangroves on Government land as 'Reserve Forests', further strengthening their legal protection.

2015

The Mangrove and Marine Biodiversity Conservation Foundation of Maharashtra (Mangrove Foundation) is a non-profit society registered under the Societies Registration Act, 1860 to enable recruitment of technical experts and provide operational flexibility for conservation programmes.

2017

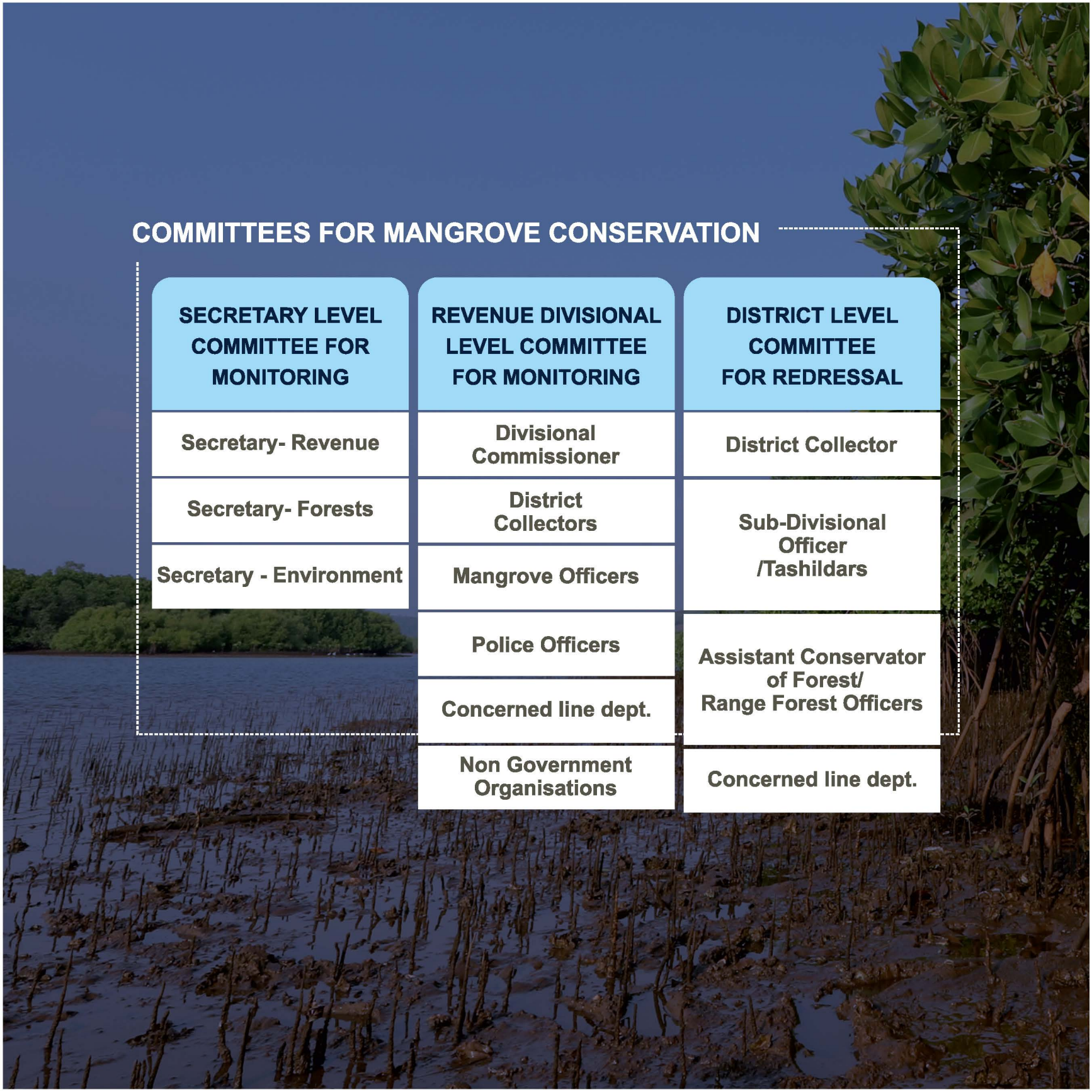
Government of Maharashtra, on 20th September 2017, has initiated a scheme on 'Mangrove Conservation and Livelihood Generation' in the coastal districts of Maharashtra.

Main objective of the scheme is to conserve mangroves through community participation by providing alternative livelihood sources.

2024

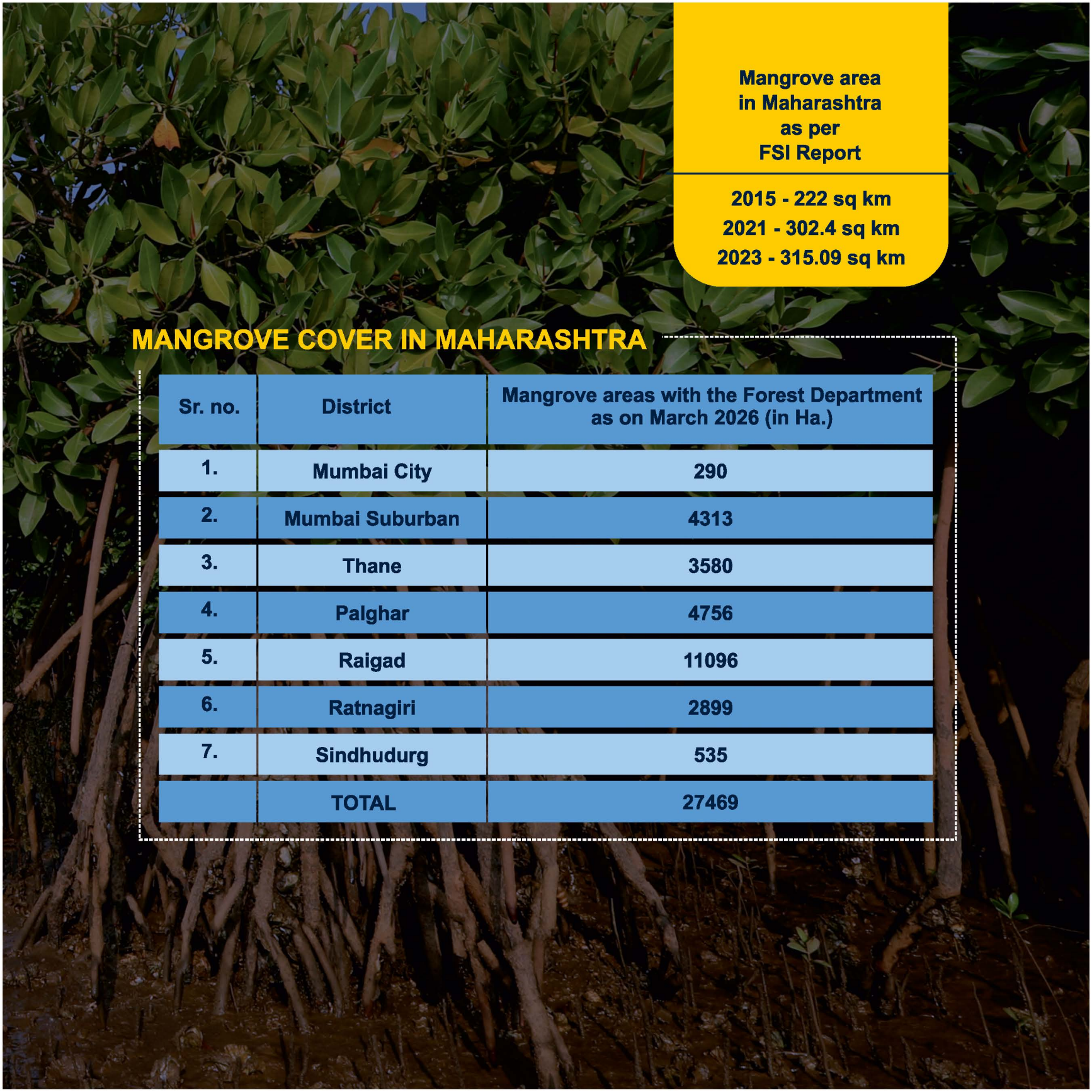
The Mumbai Mangrove Conservation Unit was reorganised as Mangrove Division - North Konkan, to manage the mangrove areas of Mumbai city, Mumbai Suburban, Thane and Palghar districts.

A new Mangrove Division – South Konkan was also created at Alibaug to manage mangroves in Raigad, Ratnagiri, and Sindhudurg districts.



COMMITTEES FOR MANGROVE CONSERVATION

SECRETARY LEVEL COMMITTEE FOR MONITORING	REVENUE DIVISIONAL LEVEL COMMITTEE FOR MONITORING	DISTRICT LEVEL COMMITTEE FOR REDRESSAL
Secretary- Revenue	Divisional Commissioner	District Collector
Secretary- Forests	District Collectors	Sub-Divisional Officer /Tashildars
Secretary - Environment	Mangrove Officers	
	Police Officers	Assistant Conservator of Forest/ Range Forest Officers
	Concerned line dept.	
	Non Government Organisations	Concerned line dept.



Mangrove area in Maharashtra as per FSI Report

2015 - 222 sq km
2021 - 302.4 sq km
2023 - 315.09 sq km

MANGROVE COVER IN MAHARASHTRA

Sr. no.	District	Mangrove areas with the Forest Department as on March 2026 (in Ha.)
1.	Mumbai City	290
2.	Mumbai Suburban	4313
3.	Thane	3580
4.	Palghar	4756
5.	Raigad	11096
6.	Ratnagiri	2899
7.	Sindhudurg	535
	TOTAL	27469

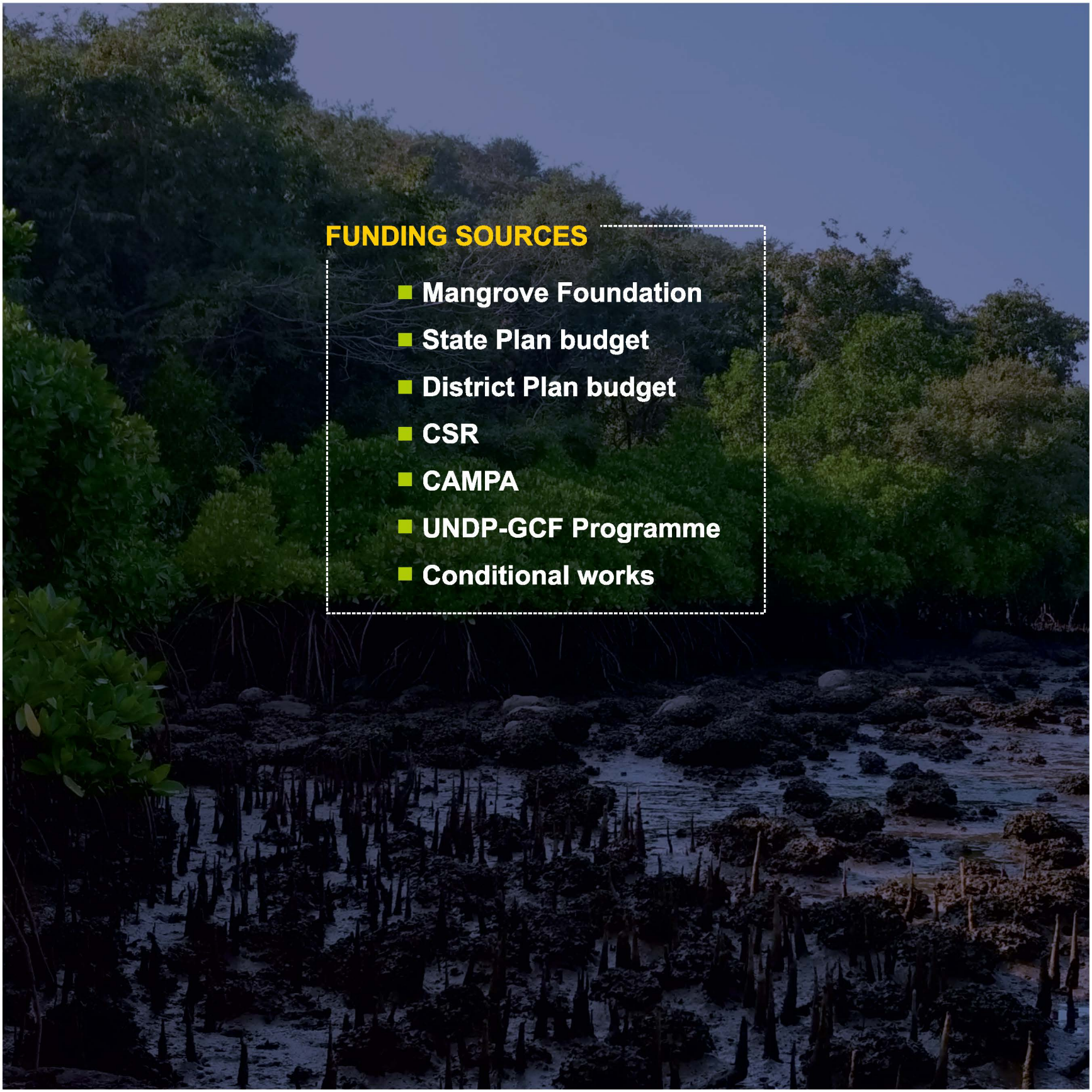
LEGAL STATUS OF MANGROVES

1. Mangroves and their 50m buffer zones come under CRZ 1A areas as per the CRZ 2019 notification

2. Mangroves in possession of Forests Department are dealt under relevant provisions of Indian Forest Act, 1927 by Forest Officers

3. Mangroves on private lands and other 50m buffer zones are dealt under the provisions of Environment (Protection) Act, 1986

4. District Collectors, Chairman or Member Secretary of the State Pollution Control Board and Secretary-Environment are empowered to take cognizance under the provisions of Environment (Protection) Act, 1986



FUNDING SOURCES

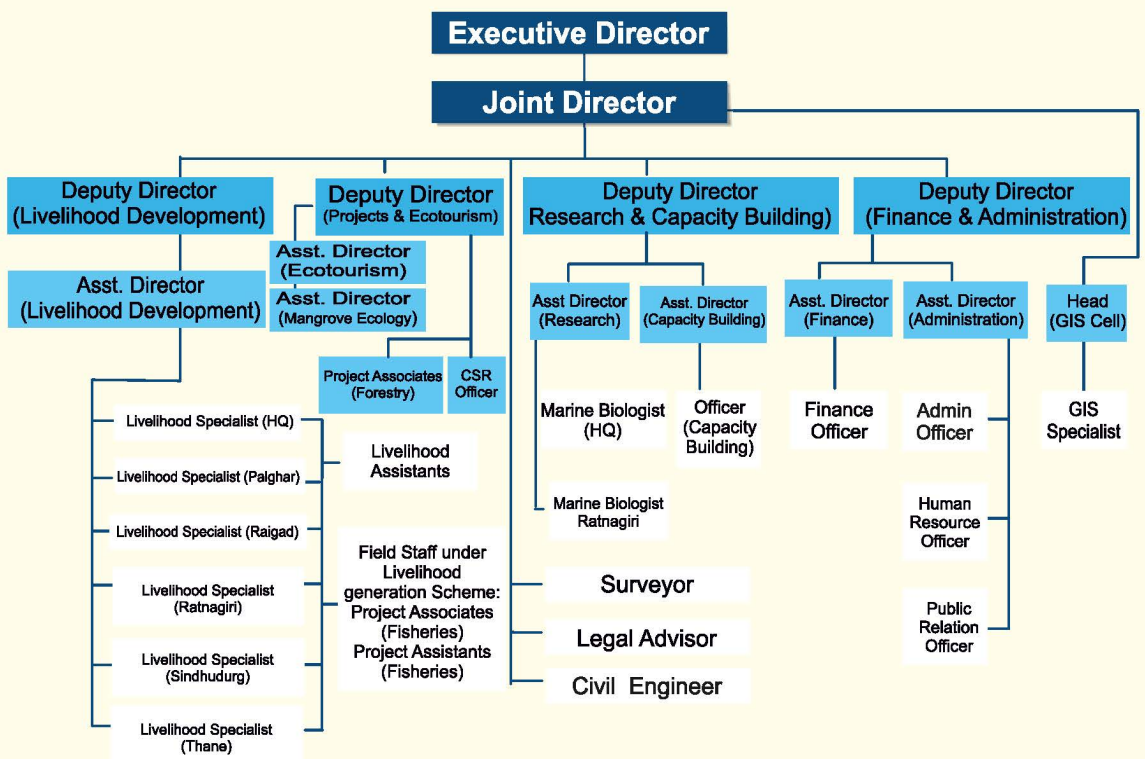
- Mangrove Foundation
- State Plan budget
- District Plan budget
- CSR
- CAMPA
- UNDP-GCF Programme
- Conditional works

MANGROVE FOUNDATION

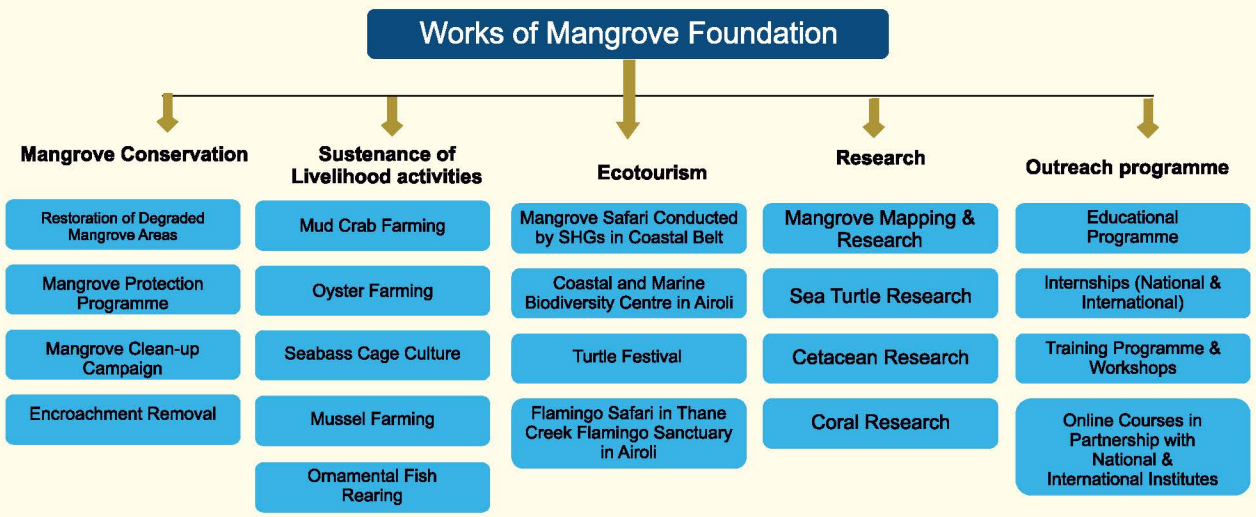
Mangrove and Marine Biodiversity Conservation Foundation of Maharashtra (Mangrove Foundation), is a non-profit society set up for recruiting necessary skill sets and operational flexibility to implement conservation programmes across the coastal regions of Maharashtra. Mangrove Foundation is a registered society under the Societies Registration Act, 1860 was set up by the Government of Maharashtra vide Government Resolution No. S-30/2015/CR 219/F-3 dated 23rd September 2015.

The Governance structure includes a Governing Body consisting of the Hon'ble Chief Minister as the Patron, the Hon'ble Forest Minister as Chairman and the APCCF (Mangrove Cell) as Executive Director. It is further supported by an Executive Committee where the Executive Director is the Chairman.

Organogram Of Mangrove Foundation



Activities of Mangrove Foundation



The Foundation was established with an inbuilt corpus and the interest generated is used for implementing various conservation activities as follows:

- Mangrove Protection Framework
- Livelihood Development
- Ecotourism Development
- Research Projects
- Capacity Building
- Communication and Awareness
- Coastal and Marine Conservation Measures
- Marine Stranding and Rescue Centre
- Miscellaneous
- Human Resources
- Administration
- Assets Procurement

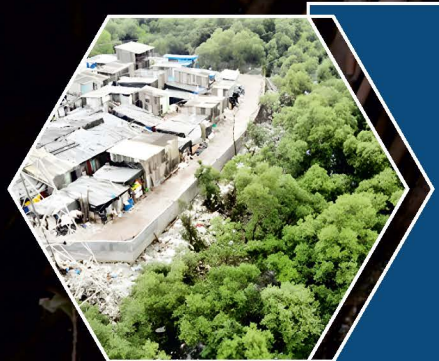
PROTECTION



Maharashtra State Security Force: Considering the high vulnerability of mangrove areas in Mumbai Metropolitan Region and its surrounding areas around 334 guards from Maharashtra State Security Force were deployed for mangrove protection



Encroachment Removal: Illegal shanties that had encroached upon mangrove lands in various parts of Mumbai were subsequently removed or demolished by the Mangrove Cell.



Protection Wall: To prevent encroachment in sensitive mangrove areas of Mumbai and the Mumbai Suburban region, the Mangrove Cell undertook the construction of Mangrove Protection Walls, with a total length of 9.44 km constructed across 25 sites.

Mangrove Suraksha mobile application: The app was developed to facilitate prompt action on complaints and grievances.

This app is available on Play Store.



GIS & Mangrove Mapping : High-resolution mangrove maps developed by MRSAC (2005), IIST (2018), and MRSAC (2022) were procured for effective monitoring of mangrove areas.



CCTV surveillance in mangrove areas in and around the Mumbai Metropolitan Region is proposed, with the installation of 669 cameras at 195 locations.



MANGROVE RESTORATION

From 2012 to March 2026, around 2,727 hectares of mangrove plantations have been completed under various schemes, including the State Plan Budget, CAMPA, UNDP-GCF, CSR initiatives, and from the funds of Mangrove Foundation. These efforts contribute significantly to the protection and restoration of mangrove ecosystems along the coastal districts of Maharashtra.



1. Mangrove restoration begins with identifying degraded sites.

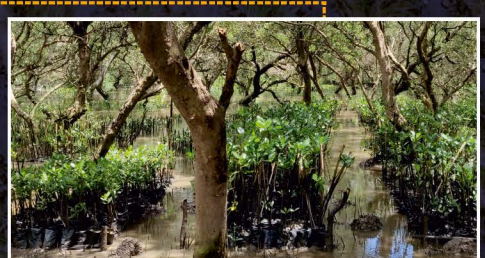
2. The plantation site is selected based on tidal inundation, salinity levels, soil characteristics, and hydrological suitability.





3. Mature and healthy propagules or seeds are collected from well-established mother trees during the appropriate season.

4. Propagules or seeds are raised in nursery beds or polybags filled with suitable saline soil under controlled conditions.



5. Channels are created using the fishbone method to enhance tidal water distribution and improve hydrological connectivity within the site.





6. Plantation is carried out along the channels, with saplings positioned to ensure proper anchorage and alignment with the tidal flow.





7. Channel maintenance undertaken during the first three years to support mangrove establishment and survival.

MANGROVE CONSERVATION AND LIVELIHOOD GENERATION SCHEME

2012-17

The Mangrove Cell implemented a UNDP–GEF funded project in Sindhudurg district to promote alternative livelihoods through mud crab farming, oyster farming, fish cage culture, and mangrove ecotourism with active community participation, along with awareness programmes on protected marine species, sustainable fisheries, and the use of square mesh nets.



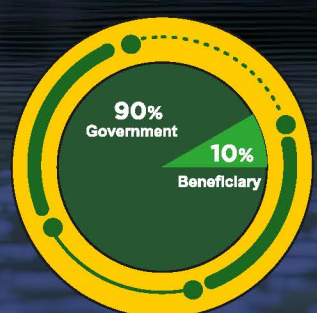




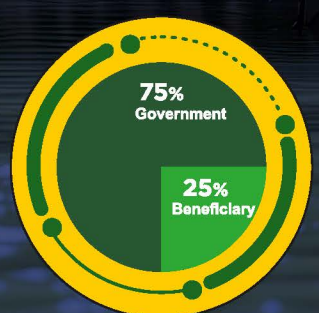
2017

Considering the increasing threat to Mangrove habitat and thus the need for their conservation and its potential for providing alternative livelihood sources, the Government of Maharashtra, on 20 September 2017, has initiated a scheme on 'Mangrove Conservation and Livelihood Generation' in the coastal districts of Maharashtra.

- The scheme is being implemented by the Mangrove Foundation through the village-based Mangrove Co-Management Committees (MCMC).
- Through this scheme, a group activity is entitled to 90% of subsidy while an individual (landowners with more than 1 acre of private mangroves) is entitled to 75% of subsidy for livelihood activities.



GROUP PROJECT



INDIVIDUAL PROJECT



- 6 Coastal Districts
- 281 MCMCs
- 758 Self-help groups
- 5884 Beneficiaries

2019

The Green Climate Fund (GCF) project "Enhancing Climate Resilience of India's Coastal Communities" was initiated across Maharashtra with the Mangrove Foundation acting as the nodal agency for implementation in the state in coordination with the Fisheries Department, Agriculture Department, and Maharashtra Maritime Board, focusing on mangrove and coral restoration, watershed management, and sustainable livelihood development.







PROMOTION OF MANGROVE CONSERVATION THROUGH ECOTOURISM

Mangrove ecotourism focuses on nature-based tourism activities in mangrove ecosystems that are environmentally sustainable and socially beneficial. Mangrove Ecotourism by the Mangrove Foundation is a community-based conservation and sustainable tourism initiative implemented by the Mangrove Foundation under the Mangrove Cell, Maharashtra Forest Department. The initiative promotes responsible tourism in mangrove ecosystems while generating livelihood opportunities for coastal communities and spreading awareness about marine biodiversity.









MAIN OBJECTIVES OF MANGROVE ECOTOURISM

- Sustainable coastal management
- Environmental education and awareness
- Promotion of biodiversity tourism
- Community livelihood generation
- Conservation of mangrove ecosystems



AQUACULTURE & ECOTOURISM



MUD CRAB FARMING

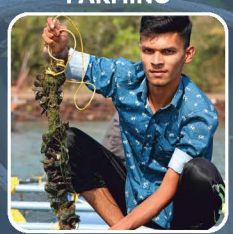


GREEN MUSSEL FARMING



OYSTER FARMING









MANGROVE ECOTOURISM



SEABASS/PEARL SPOT FISH CAGE FARMING



ORNAMENTAL FISH REARING







RESEARCH PROGRAMME OF MANGROVE FOUNDATION

Total number of research projects commissioned by Mangrove Foundation

61

No. of on-going Projects -

10

No. of completed Projects -

51















Satellite Tagging of Olive Ridley Sea Turtles



- Seven turtles were satellite-tagged in Ratnagiri and one in Palghar, marking the first such initiative on India's west coast.
- One turtle travelled from the Maharashtra coast to Sri Lanka and further towards the Bay of Bengal.
- The first stranded Olive Ridley turtle to be satellite-tagged on the west coast was tagged and released from Palghar, with movement recorded near the Oman coast.

Jackal Project



- A baseline survey on the distribution of Golden Jackals in the Mumbai Metropolitan Region was conducted by Wildlife Conservation Society - India.
- The species was found to be largely nocturnal, with moderate temporal overlap with feral dogs.
- Diet analysis revealed mammalian prey, plant matter, and small anthropogenic waste such as plastic fragments

Mumbai Dolphin Project



- The study “Coastal Cetaceans of the Mumbai Metropolitan Region” was undertaken by the Coastal Conservation Foundation.
- Surveys recorded 48 dolphin groups along the Mumbai coast, with juveniles and sub-adults forming a significant proportion of sightings.
- Most sightings occurred within 5 km of the shore, primarily during foraging behaviour.

CAPACITY BUILDING & AWARENESS

The Mangrove Foundation conducts training programmes and exposure visits for Forest Department staff and beneficiaries under the Mangrove Conservation and Livelihood Generation Scheme, including:

i. Aquaculture and ecotourism training (Seabass cage culture, Mud crab culture, Ornamental fish rearing, Nature guide training)

ii. Training on combating illegal trade in marine fauna

iii. Mangrove identification, plantation, and management training for Forest Department staff.







AWARENESS AND OUTREACH

The Mangrove Foundation organises awareness programmes in schools, colleges, and institutions, and participates in exhibitions and conferences to promote mangrove and marine ecosystem conservation.

Special programmes are conducted on key environmental days such as World Wetlands Day, International Mangrove Conservation Day, Wildlife Week, and Bird Week.

Targeted outreach activities are also held for fishing communities and other stakeholders on marine animal strandings and wildlife protection.







OLIVE RIDLEY TURTLE CONSERVATION



The Mangrove Foundation is implementing an Olive Ridley sea turtle nest conservation programme across more than 50 beaches along the Maharashtra coast in Raigad, Ratnagiri, and Sindhudurg districts.



Local nest managers are appointed to protect nests and relocate eggs to protected hatcheries.



After the incubation period, hatchlings are safely released back into the sea by the Turtle Nest Managers under the supervision of Forest Department.



During the 2024–25 nesting season, a total of 2,929 Olive Ridley sea turtle nests were successfully protected and 1,71,245 hatchlings were released



In addition, Olive Ridley sea turtles are flipper-tagged along the Maharashtra coast to study population dynamics and nesting behaviour.

COMPENSATION SCHEME



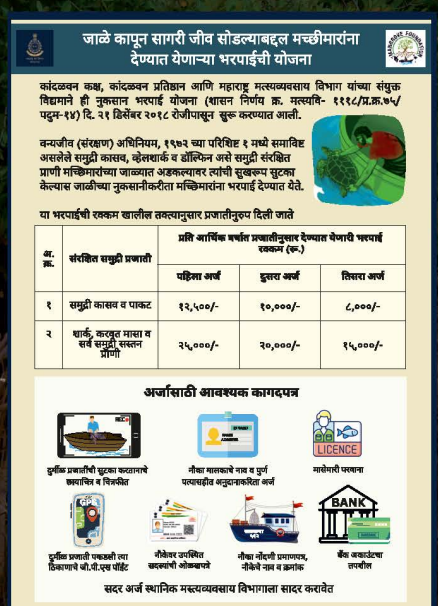


Protected marine species such as sea turtles, whale sharks, and cetaceans are safeguarded through a compensation scheme that encourages fishermen to cut their nets to safely release entangled animals.

The joint compensation scheme was launched in December 2018 by the Mangrove Cell and the Fisheries Department of Maharashtra.

---

547 fishermen have been compensated, and a total amount of Rs. 74,42,250/- has been disbursed for the safe release of protected marine animals.





MANGROVE CLEAN-UP

The Mangrove Foundation has signed MoUs with 11 NGOs for regular mangrove and beach clean-up activities across the Mumbai Metropolitan Region. During 2024–25, approximately 116 tonnes of solid waste were removed through these drives.

A mega clean-up drive organised on World Coastal Clean-up Day on 13 September 2023 resulted in the registration of three world records in the International Book of Records.

The Mangrove Cell has deployed safai sathi's at 51 locations for solid waste removal. During 2024–25, approximately 1,043 tonnes of waste were removed under this initiative.

To prevent waste inflow into mangrove areas, the Mangrove Cell, in coordination with the Brihanmumbai Municipal Corporation, Thane Municipal Corporation, and Navi Mumbai Municipal Corporation, identified key waste-carrying inlets into Thane Creek, where trash booms have been installed.







CORPORATE SOCIAL RESPONSIBILITY

The Mangrove Foundation is a government-supported implementing agency dedicated to conserving and protecting mangrove and marine ecosystems while strengthening the resilience of coastal communities through Corporate Social Responsibility (CSR) initiatives. Registered with the Ministry of Corporate Affairs (CSR-1), the Mangrove Foundation is fully authorized to receive and implement CSR funds in compliance with Section 135 of the Companies Act, 2013 and the CSR Policy Rules, 2014. Its initiatives are aligned with Schedule VII of the Act.

With valid registrations under Sections 12A and 80G of the Income Tax Act, 1961, the Mangrove Foundation ensures tax benefits for its partners while maintaining the highest standards of transparency, accountability, and impact-driven reporting. Through strategic collaborations, the Mangrove Foundation offers corporates a credible platform to achieve their sustainability and ESG goals while delivering measurable environmental impact and lasting community change.

Mangrove Foundation collaboration with Multiple CSR Engagement Models for Sustainable Impact

Financial Support — Support high-impact CSR initiatives through funding of projects such as mangrove plantation, mangrove clean-ups, and sustainable livelihood development programs.

Volunteer Engagement — Engage employees in coastal clean-ups, awareness sessions, and nature trails to build environmental responsibility.

In-Kind Support — Facilitate effective conservation by supporting critical infrastructure and services through in-kind contributions, including trash boom installation, protection infrastructure, patrolling vehicles, marine ambulance services, and the development of nature interpretation.

Our Strategic Corporate Partners

United Way Mumbai | Skoda Volkswagen | Rotary | MTDC | ICICI Bank | adani Electricity

JSW Foundation | CMA CGM | Ajmera Built on Trust | SBI | Inner Wheel | MahaIT Imagine. Invent. Inspire | FRCM

The Mangrove Foundation's initiatives contribute significantly to the following United Nations Sustainable Development Goals (SDGs):

SUSTAINABLE DEVELOPMENT GOALS



Key CSR Project Areas for Collaboration

1. Ecosystem Conservation & Restoration

- Mangrove Plantation
- Mangrove Protection
- Mangrove Clean-Up & Waste Management
- Sea Turtle Conservation
- Marine Conservation & Rescue

2. Community & Livelihood Development

- Sustainable Livelihood Programs
- Ecotourism Promotion
- Ecotourism Infrastructure

3. Infrastructure & Technology Support

- Mangrove Park Development
- Surveillance & Monitoring Systems
- Rescue & Mobility Infrastructure

4. Awareness & Capacity Building

- Awareness & Outreach Programs
- Nature Trails & Experiential Learning

Key Achievements through CSR Support

- Restored over 181+ hectares of degraded mangrove land through CSR initiatives
- Installed 1300 meters of chain-link fencing for mangrove protection and conservation
- Established Nature Interpretation Centres to promote mangrove and marine habitat education and awareness
- Conducted awareness sessions for schools and colleges, reaching 7000+ students through CSR initiatives
- Procured patrolling vehicles and bus to strengthen field operations and conservation outreach
- Supported sea turtle conservation through honorarium to nest managers, along with awareness and capacity building programs

MANGROVE PARKS / TRAILS / CONSERVATION CENTRES

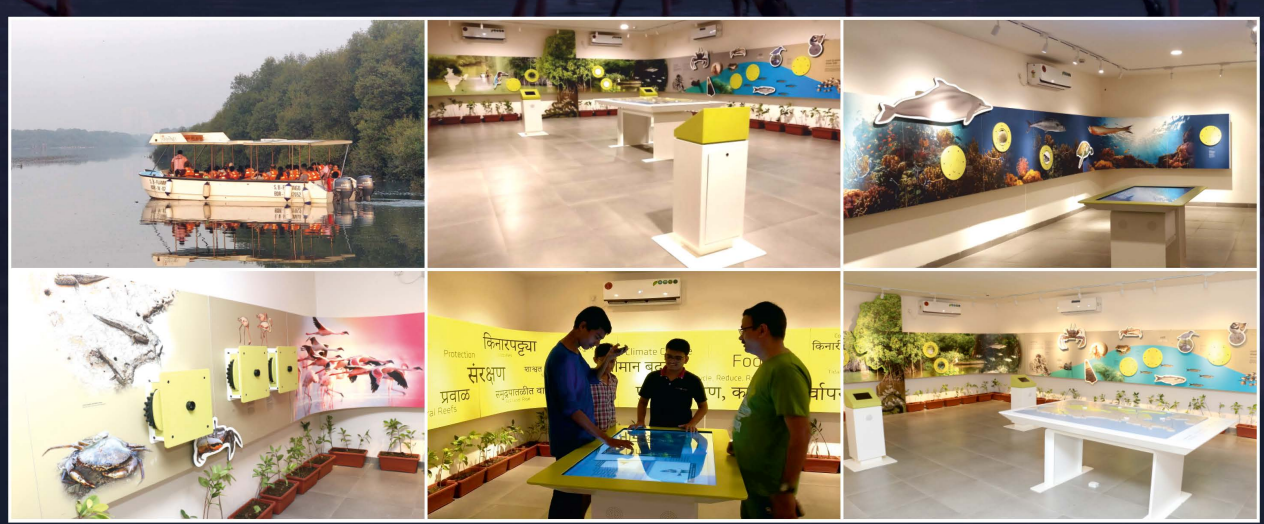
Coastal and Marine Biodiversity Centre



It is a state-of-the-art interpretation facility developed at the Thane Creek site to promote conservation education and raise awareness about Maharashtra's coastal and marine biodiversity, with a special focus on Thane Creek and the need to conserve this unique ecosystem. The Centre uses a blend of visual, audio, and tactile elements to engage visitors, complemented by interactive screens and a cinema room for documentary films.

Key attractions include

1. **Interpretation centre,**
2. **Bamboo boardwalk,**
3. **Flamingo boat safari,**
4. **Mangrove species arboretum**



Bharatratna Atal Bihari Vajpayee Kandalvan Udyan

It is India's first dedicated mangrove conservation and ecotourism site, developed across in Gorai, Mumbai. It is designed to educate visitors about mangrove ecosystems and coastal biodiversity while preserving the environment.

The park features the following key attractions :

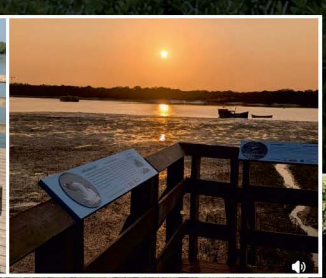
1. Nature Interpretation Centre with interactive exhibits,
2. 750 mtr. elevated wooden boardwalk through the mangroves without cutting trees,
3. 18 mtr. tall watchtower
4. Sustainable design elements such as solar power and eco-friendly infrastructure

ATTRACT **ENGAGE** **EDUCATE**











MANGROVE DIVERSITY PARK, AIROLI

The Mangrove Diversity Park Airoli has been developed by the Mangrove Foundation with the objective of promoting conservation, awareness, and ecotourism related to mangrove ecosystems. The park is located along the ecologically important Thane Creek and serves as an important site for environmental education and nature interpretation.







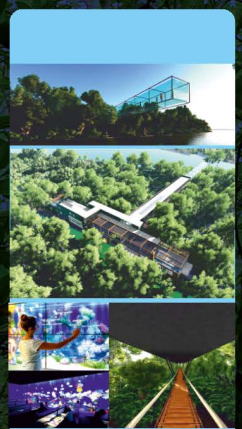
Total species in India
46

Species found in Maharashtra
18

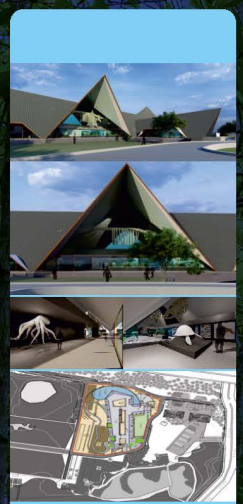
Species currently planted in the park
31

Remaining species to be procured
15

UPCOMING MANGROVE PARKS



Dahisar Mangrove Park
Dahisar, Mumbai



Gaint of the Sea Museum
Airoli, Navi Mumbai



Thane Creek Bird Park,
Bhandup, Mumbai



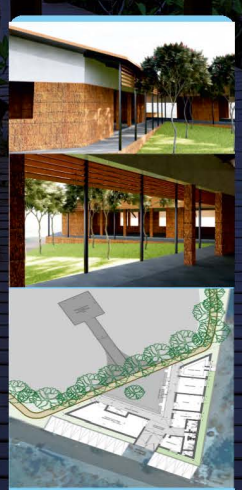
Airoli/ Ghansoli Mangrove Parks
Airoli-Ghansoli, Navi Mumbai



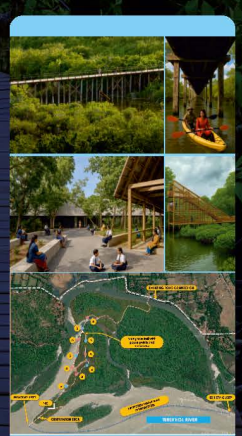
Nachane Mangrove Park
Nachane, Ratnagiri



Juve-Jaitapur Mangrove Park
Jaitapur, Rajapur



Vengurla Mangrove Park
Vengurla, Sindhudurg

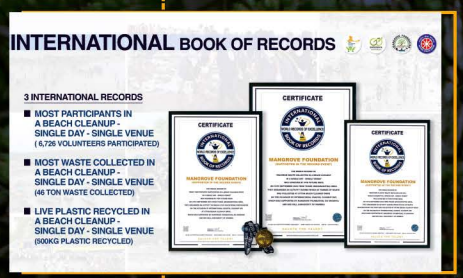


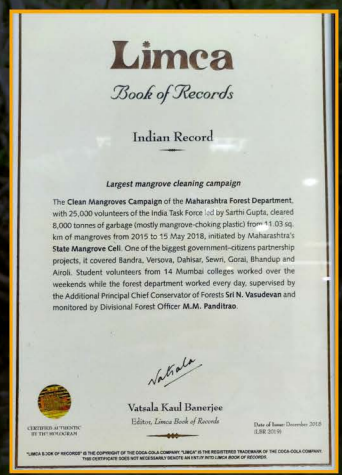
Aronda Mangrove Park
Aronda, Sindhudurg



AWARDS & RECOGNITION


India Biodiversity Awards 2018
Sustainable Use of Biological Resources
Special Mention
GoI-UNDP-GEF Sudhaduru Project, Maharashtra


INTERNATIONAL BOOK OF RECORDS
3 INTERNATIONAL RECORDS
- MOST PARTICIPANTS IN A BEACH CLEANUP - SINGLE DAY - SINGLE VENUE (6,726 VOLUNTEERS PARTICIPATED)
- MOST WASTE COLLECTED IN A BEACH CLEANUP - SINGLE DAY - SINGLE VENUE (46 TON WASTE COLLECTED)
- LIVE PLASTIC RECYCLED IN A BEACH CLEANUP - SINGLE DAY - SINGLE VENUE (500KG PLASTIC RECYCLED)

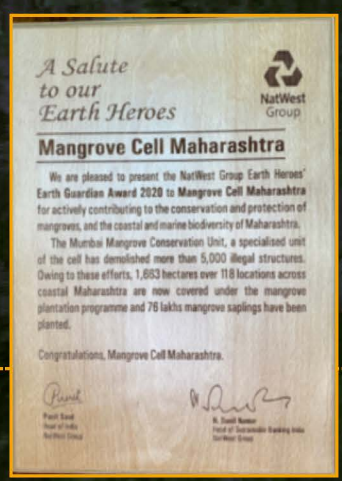

Limca
Book of Records
Indian Record
Largest mangrove cleaning campaign
The Clean Mangroves Campaign of the Maharashtra Forest Department, with 25,000 volunteers of the India Task Force led by Sarthi Gupta, cleared 8,000 tonnes of garbage (mostly mangrove-choking plastic) from 11.03 sq. km of mangroves from 2015 to 15 May 2018, initiated by Maharashtra's State Mangrove Cell. One of the biggest government-citizens partnership projects, it covered Bandra, Versova, Dahisar, Sewri, Gorai, Bhandup and Airoli. Student volunteers from 14 Mumbai colleges worked over the weekends while the forest department worked every day, supervised by the Additional Principal Chief Conservator of Forests Sri N. Vasudevan and monitored by Divisional Forest Officer M.M. Panditrao.
Vatsala Kaul Banerjee
Editor, Limca Book of Records










A Salute to our Earth Heroes
NatWest Group
Mangrove Cell Maharashtra
We are pleased to present the NatWest Group Earth Heroes' Earth Guardian Award 2020 to Mangrove Cell Maharashtra for actively contributing to the conservation and protection of mangroves, and the coastal and marine biodiversity of Maharashtra.
The Mumbai Mangrove Conservation Unit, a specialised unit of the cell has demolished more than 5,000 illegal structures. Owing to these efforts, 1,663 hectares over 118 locations across coastal Maharashtra are now covered under the mangrove plantation programme and 76 lakhs mangrove saplings have been planted.
Congratulations, Mangrove Cell Maharashtra.



WAY FORWARD

1. Conservation of Mangroves on Private Lands
2. Empowerment of Mangrove Divisional Forest Officers under Environment (Protection) Act, 1986
3. Elucidate the effects of various pollutants on Mangrove ecosystem
4. District-wise Zonation maps of mangrove species
5. Permanent Mangrove Preservation plots
6. Study of Carbon sequestration capacity of mangroves of Maharashtra
7. Study on mangrove associate species and its benefits
8. Coral Conservation and Restoration
9. Solid-waste free mangroves
10. Mangrove Management Plan

