

A Report on Webinar,

26 July, 2021, 10-30 AM to 1 PM

Speakers:

1. Dr. Ratnaker Jawhari, Director, IFB
2. Dr. S. Chakrabarti, Scientist G & Head, FRCCE, Visakhapatnam
3. Dr. R. Ramasubramanian, Principal Scientist and Coordinator from MS Swaminathan Foundation
4. DR. B. Nagarajan, Scientist-G, IFGTB, Coimbatore.

Celebrating International Day for Conservation of Mangroves

at

Forest Research Centre for Coastal Ecosystem

Visakhapatnam, Andhra Pradesh



Welcome Session:

The Virtual meet was initiated by the welcome address of the Head FRCCE Dr. Sumit Chakrabarti, (Scientist- G) during which he mentioned about importance of such celebrations and invited Director, IFB, Hyderabad, for inaugural speech.

Dr. Ratnaker Jawhari discussed about the mangroves existence in Andhra Pradesh, his relation and work experience with mangroves, as well the importance and need for their conservation. He also expressed that most of the people living close to the mangroves are unaware of their importance, so more awareness campaigns should be organized in order to bring awareness among the fisher communities and others living in close to Mangrove ecosystems. He also mentioned about the Mangrove project taken up by Dr. S. Chakrabarti which can bring awareness among people of Visakhapatnam. He also discussed in brief about Krishna and Godavari mangroves. After discussing the above points, he gave a nod for the next session to be continued.

First Presentation:

Followed by the inaugural speech, the session moved forward to technical session, in which due to network connectivity problem, the first speaker Dr. Rama Rao couldn't join the session in time. So Dr. S. Chakrabarti gave a presentation on present status of mangroves in Andhra Pradesh focusing on Visakhapatnam. Maps representing the overall existence and distribution of mangroves in India, with reference to Andhra Pradesh were presented. He also expressed that status of mangroves in Visakhapatnam was not mentioned in any of the previous or recent journals. Many of the mangrove patches were destroyed in Visakhapatnam due to high anthropogenic activities and to some extent through natural disasters was also mentioned during the presentation. Photographs representing the mangrove patches in Visakhapatnam were also displayed during the session. Dr. Ratnaker Jawhari questioned regarding few photographs about the places where they have been taken and the route to approach the particular mangrove patches. Pictures included Pudimadaka mangroves, port area mangroves and degraded patch of Bangarammapalem mangroves. Also various developmental stages of *Avicennia* spp. (flowering etc.) and *B. cylindrica* (fruiting etc.) in Pudimadaka patches were mentioned. In the presentation five types of mangrove forests – Mangrove fringe, Overwash, Riverine mangroves, Basin mangroves and Scrub mangroves were also discussed.

Second Presentation:

The second speaker Dr. R. Ramasubramanian, Principal Scientist and Coordinator from MS Swaminathan Foundation started his special lecture on Mangrove Propagation Technique. The introduction of the presentation included the coastline area of India, its diversity and its high productivity. It also included the coastal ecosystems as potential carbon sequesters, the CO₂ flux in Pichavaram and Sunderban mangrove forest was represented graphically. The livelihood for small artisanal fisherman was also clearly shown through photographs in the slide. Mangrove distribution in India and Andhra Pradesh was mentioned along with display of some rare mangrove species in Krishna wetlands like *Ceriops tagal*, *Xylocarpus granatum*, *Sonneratia alba* etc. Impacts of climate change on mangrove ecosystem with reference to cyclones like Gaja cyclone in Muthupet, before and after cyclonic satellite view of mangrove patch was clearly displayed through slides. Restoration of degraded mangroves, maintaining mangrove nursery in intertidal area, air layering in *Scyphiphora hydrophyllacea*, using root inducing hormone in propagation, canal digging, mangrove plantation established in Krishna district, land use and land cover classification of mangroves in the reserve forests in Godavari mangrove wetlands were the aspects discussed as main points. The presentation was concluded by suggesting the management options of mangroves. Following the presentation, there was a queries session during which Dr. Pravin Chawhan (Scientist-G), GCR, IFB, asked about elimination or the techniques to reduce the growth of babool trees (*Prosopis julifera*) in mangrove areas.

Walk-the-Talk from Field

The second presentation was followed by a real time tour from the field, arranged by DR. B. Nagarajan, Scientist-G, IFGTB on his research work on *Rhizophora* sp. in Pichavaram. The propagules of *Rhizophora mucronata* considered as the mother plant for their experiments were maintained through automatic mangrove incubation system. In this incubation unit, a trough system planted with propagules were maintained through two modes of irrigation namely shower mode and tidal approach which is automatic mangrove incubation system.

In this incubation unit, a trough system planted with propagules were maintained through two modes of irrigation namely shower mode and tidal approach which is automatic. For more nutritious supplements to reach the propagules, in a triangular slot shrimps were also grown facilitating green algal growth for them. He expressed that 40% more productivity is expected in their experiments. The cleistogamous flowers and chasmogamous flowers pollination pattern was also mentioned during the virtual tour. He also explained that in around an area of 1768 hec. of mangroves in Pichavaram, only 66 hec. are *Rhizophora* spp. He said that among two species of *Rhizophora* ie., *Rhizophora mucronata* and *Rhizophora apiculate*, *Rhizophora mucronata* is considered as mother plant by them due to the chasmogamy exhibited by the species. Also a dark green patch with *Rhizophora* sp. and a light green patch with *Avicennia* sp. in the field were shown to the webinar participants which was very realistic and enthusiastic experience to the viewers.

Concluding Session:

After the virtual tour, the feedback from the dignitaries present in the meet were taken by the Director, IFB, Dr. Ratnaker Jawhari, IFS and Head FRCCE, Dr. S. Chakrabarti. The vote of thanks for the session was delivered by Shri T. Srinivas, Scientist-B, FRCCE. He thanked the patron, Dr. Ratnaker Jawhari, Dr. Nitin Kulkarni sir, Director, IFP Ranchi, the organizer Dr. S. Chakrabarti. He thanked the speakers DR. R. Ramasubramanian and Dr. B. Nagarajan for spending their valuable time and sharing the most interesting information regarding mangroves. A deep sense of appreciation to the organising team for all their efforts and the participants for their wonderful participation was expressed by Shri T. Srinivas as the concluding remarks. More than 50 participants from various parts of India, including few Directors and Scientists of ICFRE institutes. The programme was compeered by Smt. Anusha, Technician and overall was a great success.

Short Glimpses of the Webinar:

