

Institute of Forest Genetics and Tree Breeding, Coimbatore
Report of Seminar on “Creation of Man Made Forest for Environmental Protection”
on 27.08.2021

IFGTB had organized monthly periodical seminar/webinar on “Creation of Man Made Forest for Environmental Protection” on 27-08-2021. Dr. R. Yasodha, Scientist-G, GCR, IFGTB welcomed all the members and special invitees briefing the movements happened at Rajasthan and also mentioned the importance of protection of trees/environment by quoting the Chipko movement.

Dr. A. Vijayaraghavan, Scientist -E, IFGTB delivered a brief overview of the seminar. He explained that the present scenario of global development is attracting great mismatch between the available natural forest resources and human requirement. WHO recommendation of 9 M^2 per capita green cover requirement to satisfy all the environmental needs of the world population. At the same time, there is a little scope to increase the natural forest area and only options is to promote forest/ tree plantation outside forest area. Besides, the promotion of artificial forest is also a viable and cost effective mechanism to promote climate resilience due to vagaries of nature. He said there is a huge gap between demand and supply of wood. He also cited the works carried out by the institute in development of models for conversion of plantations into secondary forests in Andaman Islands.

Dr. C. Kunhikannan, Director, IFGTB in his inaugural address informed about the requirement of reforestation in stress sites quoting “We cannot create forest but can restore”. He said that there is scientific fact that tree planting can modify the environment and mentioned examples for the manmade forest like Smrithivanam and Sarang model at Attapadi. He gave a brief about the *Miyawaki* type of forest created in the Singanallur Lake. He also suggested that *Miyawaki* type of forest is a good method to practise in an urban environment for developing quick greenery.

About 125 participants which included the head of the divisions, scientists, officers and research staff including SRFs, JRFs, RAs and FAs participated in the seminar through virtual mode and offline. Dr. A. Balasubramanian, Professor and Head, Department of Silviculture and NRM gave a detailed lecture on "Creation of Man Made Forest for Environmental Protection and Climate Resilience". He suggested to include indigenous species for creation of forests. He explained about the importance of species association and the commercial tree farming and nowadays people are interested in creating forests. He discussed about the work carried out in four different metro cities for green cover and told that the Pollution tolerance level of different species varies, so species should be chosen and designed based on type of pollutants like Sulphur on urban areas. He also explained that selecting the dominant species for planting helps in good growth, good carbon sequestration and finally getting converted into a good forest, imitating a natural forest. Systematic introduction of good species to increase canopy is needed in the creation of forest. He also explained that it provides a chance to introduce endangered species to human habitat and thus conserving endangered

species through this method. He also shared some successful stories at Sathyamangalam, Kanuvai etc. He informed such type of forests should be created at places with water sources available and also the importance of fencing for protection.

Mr. Vanam Kalaimani, Founder/Director, Vanam-Tiruvarur, Tamilnadu gave a talk on "Creation of manmade forest - Miyawaki". He explained all the planting works done during the Gaja storm. He informed that depending on the soil conditions modifications must be made to the Miyawaki forest model. He briefed about the awareness created to public and students through various tree mela's /exhibitions conducted.

Mrs. Vinny R Peter, Secretary, CUBE, Coimbatore made a presentation on "Creation of Manmade forest- A case study in Singanallur Lake, Coimbatore, Tamilnadu". She informed that Singanallur Lake was declared as the Urban Biodiversity Conservation Zone in 2017 by Coimbatore Corporation. A new species of insect "*Asphondylia singanallurensis*" has been reported from the lake. During her speech she informed that 333 plants were planted in 1000 square feet area. She suggested that selection of tree species should be made wisely so that fast growers as well as slow growers perform well and the land should be properly cleaned and filled with biodegradable waste/organic debris along with beneficial microbes.

Dr. A. Karthikeyan, Scientist- F, IFGTB, Coimbatore gave a talk on "Utilization of beneficial microbes on creation of manmade forest under stressed ecosystem". He discussed the role of microbes in manmade forests. He explained the importance of microbes in plant nutrient improvement, plant health improvement, protection against pests and diseases, salt tolerance and stress tolerance. During the discussion Mrs. Vinny R Peter asked about the usage of microbes for plants growing in the forest campus. Dr. Karthikeyan replied that only species adapted to black cotton soil will grow well in this environment.

The seminar concluded with the vote of thanks by Dr. A. Vijayaraghavan, Scientist-E, IFGTB.



