



INSTITUTE OF FOREST BIODIVERSITY (IFB), HYDERABAD

22.09.2021

A Report on Bharat Ka Amrut Mahotsav Celebrations from 20.09.2021 to 24.09.2021 at Institute of Forest Biodiversity (IFB), Hyderabad.

In the series of events organized to commemorate **“Bharat Ka Amrut Mahotsav”** a webinar was organized at the Institute of Forest Biodiversity, Hyderabad on 22.09.2021. The subject of webinar was “Application of fly ash in forestry, land reclamation and other sectors” under umbrella theme *“Scientific Achievements and Technological Advancements in India”*. On the onset of webinar, Shri Pravin H. Chawhaan, (Scientist-G) & Group Coordinator Research, IFB, Hyderabad has welcomed the renowned speakers of the programme, scientists, officers, students, staff, and others participants for the webinar. He briefed about the importance of fly ash as resource material in his introductory note. Webinar was attended by 31 participants from different organization such as FCRI, Mulugu, FRCER, Prayagraj, TFRI, Jabalpur, FRCCE, Vishakhapatnam etc.

The first speaker was Dr. Vimal Kumar, Former Mission Director, FAM, Department of Science & Technology, GOI. Presently Vimal Kumar is Secretary General, Centre for Fly Ash Research and Management (C-FARM), New Delhi. He is one of the pioneer workers in the field of fly ash in India. Dr. Vimal Kumar, delivered a talk on **“Use of fly ash in forestry**

and rejuvenation of waste/degraded lands". The speaker enlightened the audience about physical and chemical properties of common fly ash. He also intimated that the heavy metals content of Indian fly ash is within WHO recommended limits and described the residual impact of radioactivity & heavy metal content of fly ash on soil as well as produced crop. He showed the data on toxic elements like heavy metals and radionuclides content of fly ash which was done by BARC and NIN and found to be in the WHO recommended limits. He also said that fly ash not only improve the physical and chemical properties of soil but also increase the water holding capacity & thus improved the yields of vegetables and other crops. He explained in details about the projects on the use of fly ash in the forest nursery and the plantation of important tree species mainly Eucalyptus and Teak, which were carried out by different organizations. He also shared his experience and opined that fly ash is an excellent soil conditioner on different types of forestry tree species citing the example of plantation at Barabati site under Sukinda Range. In the outset of his presentation, he stressed that the fly ash has been used in different sector, such as forestry, reclamation of waste degraded/forest lands, yield enhancement of vegetables and other crops. However, he opined that awareness should be increased among the stake holders and appreciated that this kind of webinars would be helpful in this regard. He also requested the organizer to establish the fly ash plot in IFB, Hyderabad.

The presentation of Dr. Vimal Kumar was followed by a presentation by Dr. Avinash Jain, Scientist F, Tropical Forest Research Institute, Jabalpur delivered a lecture on **"Management of Fly ash in thermal power plant & its application in forestry sector"**. The speaker introduced the topic to the audience by quoting the production of Fly ash by thermal power plants. He informed that TFRI, Jabalpur has been working on fly ash for long time to resolve the problems of industry and common people conflicts. He quoted the examples of NTPC, Ramagundam, NTPC, Dadari, Adani power plant, Maharashtra. He suggested many herbs and trees species for the reclamation of fly ash areas. He demonstrated some models of reclamation done by TFRI, such as Fly ash Dyke model. He informed the audience about the forestry parks/ development parks established in the fly ash areas of the

concerned power plants. The speaker concluded the seminar by emphasizing the need to utilize fly ash for reclamation of degraded lands.

The third speaker Dr. Sanjay Bhojar, Professor & Head, Department of Soil Science & Agriculture Chemistry, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, Maharashtra delivered a talk on “**Application of fly ash in forestry, land reclamation and other sectors**”. The speaker gave the audience a glimpse about the cumulative effect of fly ash on physical & physico-chemical properties of soils and available soil nutrients. Later, the Impact of Graded levels of Fly Ash on Physical & Chemical Properties of Black Soil was also demonstrated by the learned speaker. The speaker also explained about Residual effect of fly ash on heavy metal content of soil. The speaker presented very good data about the application of fly ash on 23 crops including oil seed crops, vegetable crops, cotton & also horticultural crop and their improved yield. He informed that fly ash always has positive effect on the yield of crops. In the last he recommended the use of fly ash in nursery plantation, agriculture fields as well as on agroforestry to improve the quality of soil as well as related crops/plants.

Each presentation was followed by a discussion & question answer session. Dr Pankaj Singh, scientist-C, Genetic & Tree Improvement Division has coordinated all the activity during the webinar including introduction of the speakers. Ms. Ruby Patel, Scientist-B has also been actively involved since the inception of this webinar. The vote of thanks was given by Shri Pravin H Chawhaan Scientist-G to all the resource person, participant and organizers for making this webinar successful. He also thanked to Head extension/ his team for their support during the webinar.

Glimpses of the Webinar

