

FRI Celebrated Day to Combat Desertification and Drought -2021

Environmental Information System (ENVIS) Resource Partner and Forest Ecology and Climate Change Division of Forest Research Institute Dehradun, celebrated World Day to Combat Desertification and Drought – 2021. On this occasion, a webinar cum online declamation contest for Indian College/ University students was organized on the theme “**Eco-restoration and rehabilitation**”. Dr. Vijender Panwar, Coordinator ENVIS-FRI delivered the welcome address and organized the online event.

Sh. Arun Singh Rawat, Director General, Indian Council of Forestry Research & Education (ICFRE) and Director Forest Research Institute (FRI) Dehradun, was the chief guest. He informed that globally, 23 percent of the land is no longer productive; 75 per cent has been transformed from its natural state, primarily for agriculture. This transformation in land use is happening at a faster rate than at any other time in human history and has accelerated over the last 50 years. He stated that many initiatives had been taken across the globe to address issues related to desertification and drought. As per the latest estimates, 96.40 mha (29.32% of total geographical area) area of our country is undergoing land degradation, out of which 82.64 mha falls under drylands. Land degradation is increasingly becoming a major concern in India, reflected in the commitment to achieve land degradation neutral status by 2030 as a signatory to the UNCCD.

In tandem with its sister institutes under ICFRE, Forest Research Institute Dehradun addresses this issue by developing suitable models of restoration for various degraded lands, e.g., coal mine overburden dumps, limestone mines, salt-affected soils, degraded hills, waterlogged areas, desert sand dunes etc. These research findings are also extended to end users through the ‘Direct to consumer’ scheme, besides hands-on training on the package of practices. Highlighting the problem of soil sodicity in arid and semiarid regions of Indo-Gangetic plains in India, he appreciated the contribution of FRI in reclaiming 2108 ha sodic soil into productive land with the green cover. He also emphasized that India has thousands of hectares of barren degraded lands due to surface mining and mine overburden dumps, posing serious threats to environmental stability. Accordingly, FRI prepared a ‘Road map’ for plantation work in such areas and developed package of practices for restoration of coal mine overburden dumps in Dhanbad (BCCL) and Singrauli (NCL) and trained 400 officials of Coal India Ltd. Suitable restoration models and their package of practices have been developed for degraded hills, waterlogged areas and desert sand dunes stabilization in western India.

On this occasion, Dr. Anurag Saxena, ICAR - Principal Scientist NDRI Haryana highlighted the causes and remediation of desertification. He said that wind erosion is a dominant process of desertification in hot deserts and has been addressed significantly over 0.4 million ha in Rajasthan with fencing, creating micro-wind breaks, dune slopes afforestation by direct seed sowing and transplanting, planting grass slips and leguminous creepers besides continuous management. Dr. Raju EVR, former HoD (Environment) Coal India Ltd. talked about eco-restoration and rehabilitation of mined out areas and shared the 3-tier eco-restoration approach for spoil dumps and degraded mined out areas resulting in the successful restoration of 800 acres of degraded land to lush green mini forests with the rejuvenation of biodiversity and food chains. Sh. N. Bala, Head, Forest Ecology & Climate Change Division FRI updated participants on "restoration of degraded dune areas" and shared experiences on the restoration of degraded drylands, waterlogged area and sand dunes in the Indian desert and nationwide initiatives of ICFRE to combat desertification. Dr. Vaneet Jishtu, Scientist from HFRI

Shimla, highlighted the need of "combating desertification in the cold deserts of the North-West Himalaya" and provided an insight to the most vulnerable ecosystem, recognized as a distinct biogeographic zone characterized by a highly harsh climate but a unique assemblage of biodiversity. He alarmed over the challenging issues for desertification from the unsustainable use and overutilization of native biodiversity, ecosystem degradation, and developmental pressures impacting climate change, focusing on tourism, all leading to land degradation and leading to desertification.

In an online declamation contest amongst Indian college/university students, Apoorva, Sunrise Academy of Management begged first prize. Mansi Singal, M.Sc. Environment Management, Forest Research Institute demed to be University second prize, and Surbhi Sharma, M.Sc Forestry, Forest Research Institute, Dehradun won the third prize.

Sh. N. Bala Head, Dr. Tara Chand, Dr. Parmanand Kumar and Dr. Abhishek Verma, Scientists from Forest Ecology and Climate Change Division of FRI adjudged online declamation competition. All Head of Divisions, Scientists, Technical Officers of FRI, Students and other stakeholders also participated in these celebrations. The programme ended with congratulations to the winners and special thanks to the guest speakers.

