

Forest Types of India: Revisited

ICFRE revises the historical Forest Types of India

India's forests are shifting towards drier condition, resulting in reduced biodiversity of our forests, and adversely affecting the hydrological cycle of the country. Dr. V.K. Bahuguna, Director General, Indian Council of Forestry Research Education (ICFRE) on the occasion of release of the book entitled '**Forest Types of India: Revisited**' 17th May 2013. India's forests were classified for the first time in 1936 by Sir H.G. Champion and were later revised by Champion and Seth in 1968, classifying India's forests into 16 major types and about 221 sub type groups. Today, even after a span of 45 years, Champion and Seth's classification is still in use for forest management purposes, while country's forests have undergone tremendous changes owing to various factors. In view of this, ICFRE constituted a task force in December 2011, having members from ICFRE, its institutes/ research centres and State Forest Departments with a primary aim to revisit the forest type of India and assess the changes if any due to climatic and other factors. Dr. Bahuguna further said that it is a very historical moment for ICFRE when we are revisiting the age old classification of our forests given by legendary foresters Sir H.G. Champion and S.K. Seth. Dr. V.K. Bahuguna, DG ICFRE informed that this Task Force assessed the current status of India's Forests and compared the changes in the forest types conditioned by climate change, management interventions and biotic pressures. The information in the book will serve as a baseline data to monitor vegetation changes in future.

This massive work was undertaken involving more than 150 scientists and around 1800 personnel deployed from the ICFRE institutes and State Forest Departments. The teams made valiant efforts to visit the randomly generated sample plots located in most difficult terrains and inaccessible areas. The objective of the exercise was to understand the impact of climate change on forest ecosystems and also to provide the field foresters a forest classification based on field management imperatives. A new system of classification of India's forest type has been proposed by classifying India's forest in to 10 groups instead of 16; and 44 sub type groups instead of 221, as proposed earlier by Champion and Seth in 1968.

National level data for 1901 -2009 analysed for this exercise suggests that annual mean temperature for the country as a whole has risen by 0.56⁰C over the period. During the period 1931-60 and 1961-1990 there has been steady rise in the temperature in most of the regions ranging between 0.2 to 1.0 degree Celsius. Of the 88 stations, for which the climate data was

analyzed, 42 stations have shown reduction in the rainfall during the period 1961-1990 as compared to the previous thirty years with the variation ranging between 10 to 20% within the stations. The stations showing the reduced rainfall were found distributed throughout the country without having any specific geographic regional pattern. In this context, climate change impact on the vegetation was critically examined to see the species level responses to the changes in the rainfall and temperature regimes over the years. The results reveal that many forests are moving towards drier conditions, particularly the temperate forests which is a cause of concern.

Dr. Bahuguna informed that it has been a herculean task and this monumental work was completed with utmost devotion and commitment by the task force. The study has indicated many changes occurring at species and forest sub-types levels influenced by number of factors including management interventions, anthropogenic and climatic changes. Dr. P.P. Bhojvaid DDG (research) ICFRE made a small presentation and highlighted the main findings of the Task Force the book and informed that the task force completed its work on record time. Dr. T.P. Singh ADG (FCC) presented the vote of thanks. Also present on the occasion were Shri Omkar Singh, DDG (Education), Dr. S.P. Singh, DDG (Admin), Shri Saibal Dasgupta, DDG (Extension), and Sh. V.R.S. Rawat, Addl Director (Climate Change) and Dr. K.P. Singh, Chief Protocol Officer, ICFRE.