



ICFRE Climate News

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News from ICFRE

Forests and Climate
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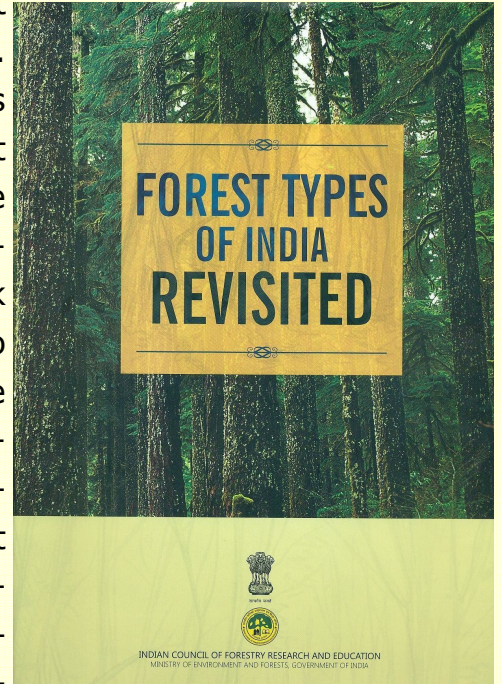
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Release of book on 'Forest Types of India: Revisited': The first comprehensive classification of Indian forests was given by Sir H. G. Champion in 1936, which was subsequently revised by Sir H. G. Champion and Dr. S. K. Seth and brought out in the form of 'A Revised Survey of Forest Types of India' in 1968. This forest classification still forms the basis of forest management across the country.

ICFRE, with a view to assess changes these forest types might have undergone over the years due to various anthropogenic and climatic factors, constituted a Task Force with the specific objectives to (i) understand the impact of climate change on forest vegetation, (ii) devise a forest classification from management perspective and (iii) orient forest classification in line with international standards for better understanding of Indian forest perspectives in the international forums. The work of the Task Force has been published in the form of a book titled '*Forest Types of India: Revisited*'.

It reveals changes in the vegetation composition in many forest types described by Champion and Seth (1968). The work has also resulted in reclassification of Champion and Seth's (1968) 16 major forest type groups into 10 major groups, and 44 subgroups. The book was released on 17 May 2013.



Workshop on Innovations for Forest Carbon Finance in India: Indian Council of Forestry Research and Education and Forest Research Institute Dehradun in collaboration with Welspun Energy Ltd. organized a workshop on 'Innovation for Forest Carbon Finance in India' on 28 May 2013 at FRI, Dehradun. Keeping the role of the carbon markets and forestry as the centre of discussion, delegates from ICFRE, FRI, USAID, TERI, IGNFA and Institute of Green Economy were present in the workshop. The workshop aimed to deliberate and achieve a broader and inclusive consensus by inviting leading minds from research institutes, scientists, representatives of Industry and State and Central Government. Dr. T.P. Singh, ADG (FCC), ICFRE gave an overview of the workshop.



Meeting of the Sub-group on Forestry and Climate Change: Meeting of the Sub-group on Forestry and Climate Change was held at Ministry of Environment and Forests, New Delhi under the Chairmanship of Secretary, MoEF, Government of India to discuss the REDD+ issues on 11 February 2013. Sh. Sandeep Tripathi, Dy. Director General (Research) and Dr. T.P. Singh, Assistant Director General (Forests and Climate Change), ICFRE participated in the meeting.

Meeting of the Expert Committee for preparation of the Reference Document on REDD+: Meeting of the Expert Committee for preparation of the Reference Document on REDD Plus held at Ministry of Environment and Forests, New Delhi on 19 March 2013. Sh. V.R.S. Rawat, Scientist 'E'/ Addl Director, FCC Division, ICFRE participated in the meeting.

Meeting of the Technical Committee of Green India Mission: First meeting of the Technical Committee of Green India Mission held at Ministry of Environment and Forests, New Delhi on 07 March 2013. Dr. R.S. Rawat, Scientist 'C', FCC Division, ICFRE participated in the meeting.

Bonn Climate Change Conference: Shri V.R.S. Rawat, Scientist 'E'/ Addl Director, ICFRE, participated as a member of official India delegation in the UNFCCC thirty-eighth sessions of the Subsidiary Body for Implementation and the Subsidiary Body for Scientific and Technological Advice as well as the second part of the second session of the Ad Hoc Working Group on the Durban Platform for Enhanced Action at Bonn, Germany from 3-14 June 2013.

Research Project on 'Screening tree species for intra-specific variation in carbon sequestration potential under elevated CO₂ :

The Research Policy Committee of Indian Council of Forestry Research and Education has approved a project on 'Screening tree species for intra-specific variation in carbon sequestration potential under elevated CO₂ under the thrust area of Forests and Climate Change during its XIV meeting held at ICFRE, Dehradun from 30-31 May 2013.

Lecture Delivered

Dr. P. P. Bhojvaid, Director, FRI/DDG (R), ICFRE delivered a presentation on 'Carbon finance for forestry based CDM under voluntary mechanism: Some options' in the workshop on 'Innovation for Forest Carbon Finance in India' on 28 May 2013 at FRI, Dehradun.

Media Reporting

India needs to reduce carbon footprint: Dr. Manmohan Singh, Honorable Prime Minister of India said that climate change has become an urgent concern across the globe and "India is among the countries that would be the most seriously impacted by the consequences of climate change. Further he said that there is need to develop ways and means to reduce our carbon footprint through technological innovation (*Source: The Hindu, 8/2/2013*).

Global warming leading to extreme rainfall: In the most comprehensive review of changes to extreme rainfall ever undertaken, researchers from the University of Adelaide, evaluated the association between extreme rainfall and atmospheric temperatures at more than 8000 weather gauging stations around the world. The results indicated that rainfall extremes are increasing on average globally. Results showed that there was a 7 percent increase in extreme rainfall intensity for every degree increase in global atmospheric temperature (*Source ANI : Telegraph London, 02/02/ 2013*).

Atmospheric carbon dioxide level reaches historic high of 400 parts per million: The concentration of carbon dioxide gas in the Earth's atmosphere passed 400 parts per million in 9 May 2013 according to the Mauna Lao Observatory in Hawaii in the Pacific Ocean, where researchers have been recording levels of CO₂ in the atmosphere since 1957. Climate scientists are worried that increasing levels of CO₂ will cause average global temperatures to rise which will have a significant impact on the planet's climate system.

The concentration of carbon dioxide in atmosphere was about 280 ppm in pre-industrial times. But the consumption of carbon-based fuels such as coal and oil as part of widespread industrialization has increased carbon dioxide in the at

mosphere and pushed global average temperatures rapidly higher (Source: http://www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news_10-5-2013-16-39-30).

Extensive, coordinated research effort required for impact of climate change on glaciers:

A two-day brainstorming workshop on “Snow, Glaciers and the Himalayan River System” organised by the State Centre for Climate Change in Shimla on 30 May 2013. The workshop emphasized on the use of the latest technology to study the behaviour of glaciers to create a database which could be used for taking up measures to mitigate the impact of climate change. Scientists, administrators and other experts have underlined the need for an effective networking of various institutions engaged in research on climate change for a well-coordinated effort to study the reaction of glaciers and in turn the Himalayan river system (Source: <http://www.tribuneindia.com/2013/20130531/himachal.htm#3>).

Scientists to study the impact of climate change in Ganga basin:

Scientists from Institute of Environment and Sustainable Development, Banaras Hindu University and others are going to be first to carry out an extensive study on the impact of climate change on the Ganga basin and come out with projections and predictions for next 40 to 50 years. The main focus of study by scientists would involve effects on river basin due to snow and glacier melting. Scientists would also develop simulation modelling and predict the climatic scenario in river Ganga basin in the future (Source: http://articles.timesofindia.indiatimes.com/2013-06-18/varanasi/40048201_1_ganga-basin-water-resources-river-basin).

Tropical forests unexpectedly resilient to climate change:

Tropical forests are unlikely to die off as a result of the predicted rise in atmospheric greenhouse gases this century, a new study finds. The analysis refutes previous work that predicted the catastrophic loss of the Amazon rainforest as one of the more startling potential outcomes of climate change. In the most extensive study of its kind¹, an international team of scientists simulated the effect of business-as-usual emissions on the amounts of carbon locked up in tropical forests across Amazonia, Central America, Asia and Africa through to 2100. They compared the results from 22 different global climate models teamed with various models of land-surface processes. In all but one simulation, rainforests across the three regions retained their carbon stocks even as atmospheric carbon dioxide concentration increased throughout the century (Source: <http://www.nature.com/news/tropical-forests-unexpectedly-resilient-to-climate-change-1.12570>).

Past Events

- ◇ **National Seminar on Climate Change and Sustainable Development: Issues and Challenges:** The Seminar was organized by Maharaja Sayajirao University of Baroda at Vadodara (Gujarat) from 23 – 24 January 2013.
- ◇ **National Conference on Strategies to Climate Change Mitigation and Adaptation towards Sustainable Development:** The conference was organized by Institute of Public Enterprise at Hyderabad from 24-25 January 2013.
- ◇ **International Conference on Agriculture and Climate Change:** International Conference on agriculture and climate change was organized by TERI at India Habitat Centre, Lodhi Road, New Delhi on 29-30 January 2013.
- ◇ **Regional level consultation on preparedness of REDD+:** Regional level consultations on Preparedness for REDD+ were held at Bangalore on 23rd January, 2013; at Agra on 3-4 February, 2013 and at Nagaland on 9th February, 2013
- ◇ **Event on Agroforestry for Food Security and Climate Change Mitigation:** The online learning event was organized by the Food and Agriculture Organization of the UN (FAO) in collaboration with the Tropical Agricultural Research and Higher Education Center and the World Agroforestry Center from 4-26 February 2013.
- ◇ **Training on Glacier Studies, Climate Change and Remote Sensing:** Training on Glacier Studies, Climate Change and Remote Sensing was organized at Indian Institute of Science from 4 to 15, March 2013.
- ◇ **International Conference on Dryland Development : Global Climate Change and its Impact on Food & Energy Security in the Dry lands:** The 11th International Conference was organized by the International Dryland Development Commission and hosted by the Chinese Academy of Sciences and Cold and Arid Regions Environmental and Engineering Research Institute (China) from 18-23 March 2013 in Beijing, China.
- ◇ **Workshop on Innovations for Forest Carbon Finance in India:** Indian Council of Forestry Research and Education and Forest Research Institute Dehradun in collaboration with Welspun Energy Ltd. organized a workshop on 'Innovation for forest carbon finance in India' at FRI, Dehradun on 28 May 2013.
- ◇ **Climate Change and Food Security in India:** National Institute for Consumer Research and Norwegian Institute of International Affairs had organized a seminar on 'Climate change and food security in India' at NUPI, C.J. Hambros Plass 2 D, Oslo on June 12, 2013.
- ◇ **Bonn Climate Change Conference:** The thirty-eighth sessions of the Subsidiary Body for Implementation (SBI 38) and the Subsidiary Body for Scientific and Technological Advice (SBSTA 38), as well as the second part of the second session of the Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP 2-2) was held at Bonn, Germany from 3-14 June 2013.

Upcoming Events

India Climate Policy and Business Conclave 2013: The India Climate Policy and Business Conclave will be held from September 18-20, 2013 in New Delhi. This annual event, which was previously known as "India Carbon Market Conclave," is India's flagship event in the climate finance and carbon market space.

Asia Pacific Workshop on Forest Hydrology: Asia Pacific Workshop on Forest Hydrology: Water and forests – Beyond Traditional Forest Hydrology will be organised by Forest Research Institute at Dehradun from 23-25 September 2013. Forest Hydrology and Climate Change is one of the theme of the workshop.

Fourth National Research Conference on Climate Change: Indian Institute of Technology Madras, Indian Institute of Technology Delhi, Indian Institute of Science Bangalore and Centre for Science and Environment, under the banner Indian Climate Research Network, are organizing the Fourth National Research Conference on Climate Change, to be held at IIT-Madras on 26-27 October 2013. The conference will cover topics related to the scientific, technical, economic and policy aspects of climate change in South Asian countries, with a special emphasis on renewable energy.

Relevant Publications

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G. Bala (2013). Digesting 400 ppm for global mean CO₂ concentration. *Current Science*, 104 (11) : 1471-1472.

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