

Five Days Training Programme

On

Climate Change and Carbon Mitigation

30 January - 3 February 2012

for

**Women Scientists and Technologists Working in Government
Sector**

Sponsored by:



**Department of Science and Technology
Ministry of Science and Technology**

Organized by:



**Biodiversity and Climate Change Division
Indian Council of Forestry Research and Education
New Forest, Dehradun – 248006**

Training Subject/ Topic Climate Change and Carbon Mitigation (CCCM)

Dates 30 January - 3 February 2012

Venue Scientist (Sal) Hostel, Forest Research Institute, Dehradun

Programme Objectives

Climate change is now universally recognized as a significant global environmental challenge and as a consequence, debate over the measures needed to tackle climate change has moved up to the top of the agenda amongst civil society, business and government. There is a need to create better international, national, and regional structures and systems to adapt to climate change; and, to develop strategies for climate change mitigation at national level to regional level. Scientists, researchers, academicians, technologists all have a role to play in the change that is needed.

The training course will provide an excellent opportunity to Women Scientists and Technologists to know about the science of global warming and climate change, IPCC reports and projections about climate change and natural ecosystems, international systems of UNFCCC and Kyoto Protocol, national scenario and climate policies, climate change mitigation and adaptation strategies, existing CDM regulations, carbon markets, and how various stake holders may develop meaningful projects that get host country approval and CDM registration.

Curricula/Module

Day 1

- Inauguration
- Global warming, climate change and natural ecosystems: projections and IPCC reports
- Climate change mitigation: international and national institutional mechanism
- Changing Climate Scenario: Group Discussion based on 'Inconvenient Truth' Movie by Al Gore

Day 2

- Climate change mitigation through clean Development Mechanism (CDM) projects: Institutional Setting and Policy Framework in India
- CDM project modalities and procedures
- Carbon markets for CDM projects
- Environmental impact assessment as a tool for climate change adaptation and mitigation

Day 3

- CO₂ Flux Measurements using Eddy Covariance
- Field visit: CO₂ Flux tower at Barkot, Rhishikesh

Day 4

- Climate change and disaster management
- Climate Change, its impact on water resources and adaptation Strategies
- Climate change impact on Glaciers
- Carbon mitigation strategy of 'Reducing emissions from deforestation and degradation in developing countries'

Day 5

- Biodiversity and climate change
- Evaluation of ecosystem services and carbon evaluation in the Himalayan Forests
- Panel discussion: Training need exercise
- Valedictory session

Methodology/Pedagogy

Power point presentation using audio visual aids, movie show, experience sharing, group discussion.

Session Plan

Four sessions of 1¹/₂ hours per day between 9 AM to 5.30 PM devoting 10 sessions to the core topic of the programme. A field trip will be organized to visit CO₂ flux tower at Barkot, Rhishikesh. Opportunities will be provided to all participants for sharing their experiences, interaction with resource persons, and group discussions. A panel discussion on 'Training Need Exercise' along with participants will be organized. A health session of 30 minutes will be arranged in early morning.

Course Director

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Resource Persons

Internal Faculty:

1. Dr. Renu Singh, Head, Biodiversity and Climate Change (BCC) Division, ICFRE

2. Dr. Anita Srivastava, Scientist, BCC Division, ICFRE
3. Shri V.R.S Rawat, Scientist, BCC Division, ICFRE
4. Dr. Om Kumar, Scientist, BCC Division, ICFRE

External Faculty:

5. Dr. Dharmandra Verma, ADG (EM), ICFRE
6. Dr. S.P.S. Kushwaha, Head, Forestry and Ecology Division, IIRS, Dehradun
7. Dr. Sarnam Singh, IIRS, Dehradun
8. Prof. S. P. Singh, Vice Chancellor (Retd.), HNB Garhwal University, Dehradun
9. Dr. A. K. Gupta, NIDM, New Delhi
10. Shri Manu Mudgal Technical Specialist CDM, IGEP, New Delhi
11. Shri Lokesh Dube, Analyst-CDM, TUV India Pvt Ltd., New Delhi
12. Shri Uma Maheshwaram, Carbon Trading Expert, GTZ, New Delhi
13. Shri R. D. Singh, National Institute of Hydrology, Roorkee
14. Shri Akhilesh Gupta, DST, New Delhi
15. Shri R. K. Mall, NIDM, New Delhi

Target Group

- Women Scientists/Technologists working as Science Administrators, engaged in the field of research and development of technology in the department/Ministries of Central Govts., Public Sector Units, Govt. aided Research institutes, Govt. Research Laboratories, Scientists/Technologists working in State Govt.
- Women Scientists/Academicians of Central and State Universities, Educational Institutions and colleges engaged in R&D in any discipline of Science and Technology
- All level of women scientists belonging to Group 'A' with minimum 2 years of service, and below 58 years of age are eligible
- Participants should not have attended DST sponsored training programme during last five years

Brief about the Institute and its facilities

Indian Council of Forestry Research and Education (ICFRE) with its headquarters at Dehradun is the apex body in the national forestry research system. ICFRE has 8 regional research institutes and 4 Centres in various parts of the country to cater the forestry research needs of different bio-geographical regions of the nation. The regional research institutes are located at Dehradun, Shimla, Ranchi, Jorhat, Jabalpur, Jodhpur, Bangalore, and Coimbatore; and the centres are located at Allahabad, Chhindwara, Hyderabad, and Aizwal.

The ICFRE is the premier forestry research organization of the country with the mandate to formulate, organize, direct, and manage forestry research, transfer the technologies developed for states and other user agencies and impart forestry education. The Council has an Observer Status with United Nations Framework Convention on Climate Change (UNFCCC).

The Council has a full fledged Division of Biodiversity and Climate Change at its Head Quarters at New Forest, Dehradun. The Division is proactive in the field of climate change and forestry; and, handled a number of national and international projects related to climate change and forestry besides organizing capacity building programmes and training to various stakeholders. To analyze the policy and CDM potential, the Division has organized a number of national and international workshops on 'Forestry and Climate Change Issues'.

The Council has 3 guest houses: (1) Officers Rest House (ORH), (2) ORH Annexee and (3) Scientist Hostel. Most of the accommodation is with A/C facilities. The total capacity of ICFRE's Officer's Guest Houses/ Scientist Hostel is more than 30, on single sharing basis. The boarding and lodging facilities have been rated as excellent by the participants of the previous training courses. At Officers' Club, facilities for Badminton and TT are also available. There is a huge National Forest Library as well in the campus.

Expectation from participants

The training will review all the relevant issues, develop briefs of the studies needed, and prepare a strategy for undertaking the research. Participants shall be ready with their experiences for sharing, and are welcome to bring brief case studies as well.