

## **Forests can be protected by enhancing livelihood of people – DG, ICFRE**

On the third and final day of the Workshop, two sessions were held on 'Enhancing carbon sequestration potential and assessment of forest carbon stocks' and 'Sustainable Land and Ecosystem Management (SLEM) knowledge sharing and dissemination'.

Regular monitoring of carbon exchange over forest ecosystems is a key to climate policy making decision due to large carbon sequestration potential of the forest ecosystems. Initiatives on forest carbon assessments in Bhutan, Bangladesh, Nepal and India were discussed by respective speakers representing their countries. Need for developing a domestic forest carbon market in India through active participation of ICFRE was deliberated. With reference to carbon monitoring in Cambodia, Malaysia, Philippines and India, the speaker from Japan highlighted the role of geospatial data and advanced machine learning to mitigate climate change and achieve several SDGs which would help the policy makers for better implementation of Paris Agreement and forest management practices for REDD+ assessment.

To measure the carbon fluxes, the Eddy Covariance Flux towers play a major role. Flux towers have been established in nine different locations of India by NRSC and IIRS, while two towers in MP and Chhattisgarh by ICFRE. Similarly, Asia Flux Network in Sarawak, Malaysia has identified the factors responsible for peatlands (a unique wetland ecosystem) carbon balance as well as carbon sequestration. Under UNFCCC, the Green Climate Fund (GCF) is playing a significant role in fund flow for achieving Paris Agreement goals. GCF at present has approved a budget of US\$11 billion of investment in over 200 projects worldwide of which 84 are in the forestry sector. GCF's role in approaching climate finance and the associated challenges in monitoring the impact on mitigation and adaptation was discussed by the speaker from South Korea.

ICFRE through the World Bank funded Ecosystem Services Improvement Project (ESIP) has been supporting the Green India Mission and LiFE mission by scaling up of SLEM practices for addressing land degradation issues and improving ecosystem services. The new tools and technologies introduced through ESIP for better management of natural resources, biodiversity and carbon stocks have directly benefited about 25,000 forest dwellers, small landholders and marginal farmers of Madhya Pradesh and Chhattisgarh. ICFRE has developed a Roadmap for Institutional and Policy Mainstreaming of Sustainable Land and Ecosystem Management in India and an online National Reporting portal 'SLEM Knowledge Sharing and Reporting System', (<https://nrhp.icfre.gov.in/>) on Land Degradation and Desertification and for up-scaling and mainstreaming SLEM best practices. Success stories of restoration of degraded lands in MP and Chhattisgarh were also presented by respective state Forest Departments. A representative from FAO detailed about the Capacity building for Forest and Landscape restoration as endorsed by FAO in advancing knowledge sharing.

The recommendations that emerged from various sessions were discussed by the panel of experts during the plenary session which was chaired by DG, ICFRE. The representatives from World Bank and ICIMOD, Nepal appreciated the work carried out by ICFRE in the Ecosystem Services Improvement Project and suggested to extend the successful model in other states of India and also in other South Asian Countries.



