

**Himalayan Forest Research Institute (HFRI), Conifer Campus,**  
**Panthaghati, Shimla, Himachal Pradesh**

**Proceedings of the Monthly Seminar held on 28<sup>th</sup> November 2019 at  
HFRI, Conifer Campus, Panthaghati, Shimla, Himachal Pradesh**

A monthly research seminar on the topic “**Valuation of Ecosystem Services**” under the theme “**Biodiversity Conservation and Ecological security.**” was organized in the Conference Hall of **Himalayan Forest Research Institute ( HFRI), Panthaghati, Shimla** on 28<sup>th</sup> Nov. 2019. **Dr. Ranjeet Kumar, Scientist–E,** Forest Ecology & Climate Change Division delivered a talk in which all the Senior Officers, Scientists, Technical Staff and Project Staff of this institute were present on this occasion for knowledge enhancement and experience sharing on new and growing concept in the field of ecology, environment and sustainable development. **Sh. Satya Prakash Negi, IFS,**

**Link Director,**  
**HFRI, Shimla**  
Chaired the proceedings of the seminar.



In his presentation, **Dr. Ranjeet Kumar** elaborated upon the genesis of the concept. He said that nature is a fusion of varied ecosystems like mountains,

forests, rivers, rangelands, etc. and all these provide tangible and intangible goods and services to mankind in the form of food, fibre, shelter, soil fertility, genetic diversity, decomposition, exchange of gases, flow of water, and nutrient cycle. Collectively, these services are known as Ecosystem Services (ESS) or Nature’s service. Valuation of Ecosystem Services is basically a mechanism to identify the benefits of ecosystem in measureable metrics for assessing the Net Present Value (NPV) for the purpose of conservation and management. It involves estimation of value of ecosystem services

based on different methodologies and in the process finally the exchange value associated with the ecological goods, is regarded as natural capital. The speaker emphatically highlighted the concept of valuation of ESS as it is gaining momentum in view of the rapidly decline and deterioration of the ecosystem services.

Dr. Kumar flagged significant issues pertaining to pollination services which are invaluable for agriculture and food production. He explained the various methods for the estimation of pollination services and pointed out the relevant policy questions on pollination services.

The speaker explained about the genetic diversity which indicates the species richness and species population which provides the basis for developing commercial cultivars, livestock and commercial products (medicine, cosmetics, etc.)



He elaborated the various data indicators to assess genetic which provide information on social and intrinsic value of species. He also pointed out the policy questions relevant to the gene pool.

Dr. Kumar also explained about the biological control by using predators and parasites to suppress pest population and reduce the damage. He discussed various data indicators of biological control and the policy questions relevant to the regulation of biological control. He also deliberated upon about the green GDP. He further explained the ongoing project at HFRI, Shimla with objective of assessment of goods and ecosystem services provided

by Salix based agroforestry system and highlighted the contribution of forest ecosystem services in National Gross Product and development of sound and widely accepted methodology of valuation of ecosystem services and suggested the evaluation of ecosystem services holistically.

Detailed future research directions and strategies including collaboration research were explained by the speaker and also apprised about the All India Co-ordinated Research Project (AICRP) being proposed to envisage a monetary value to the forests of country in direct and indirect terms to estimate the contribution of the forestry sector to GDP and green GDP of the country.

During discussion queries and concern were raised on different aspects of valuation of Ecosystem Services. There was general consensus that issue of valuation of Ecosystem Services for biodiversity conservation and ecological security is very complex and demands the concerted efforts in research. Research organizations and Line Departments are required to evolve a viable mechanism for its valuation. Sh. S.P. Negi, Link Director, HFRI suggested to incorporate the research work conducted in TEEB. Dr. Sandeep Sharma, Sci-G insisted upon the need of study of medicinal plants in relation to this field.

It was discussed and unanimously agreed that HFRI can initiate research projects on valuation of ecosystem services with the following objectives as a part of future strategies:-

1. To develop methodologies for forest valuation, both direct and indirect.
2. To determine the contribution of forests to the GDP of India.
3. To determine the value of ecosystem goods and services per unit area for different forest types.
4. To develop a model procedure for payment of ecosystem services.



It was proposed that collaboration on these lines can be done with other institutes like HPFD, J&KSFD, DST, Govt. of India, DBT, Govt. of India, MoEF&CC, Govt. of India,

New Delhi. Dr. Ranjeet Kumar, Scientist-E thanked Sh. Satyam Chauhan, GIZ, Panthghati, Shimla, Sh. Ajay Kumar, Scientist, RFRI, Jorhat and Dr. Subhash Sharma, Assistant Professor, College of Forestry, Dr. YSP UHF, Nauni, Solan for helping him in the preparation of presentation on this topic.

In the end, Dr. Rajesh Sharma, GCR, thanked Sh. S.P. Negi, Link Director, HFRI and the participants for their active involvement in the discussion, and also for providing inputs to prioritize the research needs and areas, identification of gaps, and make futuristic strategies. He expressed his contentment and added that the implicit intent of the seminar has been achieved to a considerable extent.



# GLIMPSES OF THE SEMINAR

