

## **PLANTING STOCK IMPROVEMENT FOR PRODUCTIVITY ENHANCEMENT**

### **A TRAINING PROGRAMME FOR PERSONEL OF OTHER STAKEHOLDERS**

(Funded by the Ministry of Environment, Forests & Climate Change Government of India, New Delhi)

**Organized by**

**HIMALAYAN FOREST RESEARCH INSTITUTE, SHIMLA**

**(18<sup>th</sup> – 20<sup>th</sup> July 2017)**

Himalayan Forest Research Institute (HFRI), Shimla organized a three-day training programme on '**Planting Stock Improvement for Productivity Enhancement**' from **18<sup>th</sup> to 20<sup>th</sup> July 2017**. This training programme was sponsored by the Ministry of Environment, Forests & Climate Change, Government of India, New Delhi for the personnel of other services and accordingly, the participants from the department of Agriculture, Horticulture, Animal Husbandry, Rural Development, Land Records, Block Development Offices, Revenue etc. of the state of Himachal Pradesh participated in this 3 days training programme. Training programme basically aimed at sensitization of the trainees about various forestry practices and operations towards productivity enhancement and also to initiate efforts to increase the productivity *vis-a-vis* environmental conservation.

On the request of Dr. K.S. Kapoor, GCR, **Shri Jagdish Chander, IFS, Chief Conservator of Forests (Research) Haryana**, consented to be the Chief Guest during the Inaugural session of the training programme. After the welcome address, Sh. Chander inaugurated the training programme. In his inaugural address, Sh. Jagdish informed about the gap and supply of forest produce especially, timber and fuel wood and also highlighted the importance of quality planting stock in productivity enhancement. He also stressed the need for such trainings to initiate collaborative efforts to achieve the goal of higher productivity.

Before the start of technical sessions, **Dr. Rajesh Sharma, Scientist-F & Coordinator** of the training programme highlighted the importance of this training for personnel of other services and relevance of Planting Stock Improvement in productivity enhancement. His remarks were followed by the technical session. During the first technical session, Dr. Manish Bhandari, Scientist-C from Forest Research Institute, Dehra Dun talked about clones and clonal forestry and its importance in productivity by citing examples of the work carried out by ICFRE institutes. Dr. Santhan Barthwal Scientist-E from FRI Dehra Dun talked about various techniques of vegetative propagation and its role in tree improvement. He elaborated upon clonal forestry and highlighted its significance in productivity enhancement. His presentation was followed by Sh. Jagdish Chander, CCF (Research) Haryana, who delivered a talk on tree improvement programme in the state of Haryana and highlighted the significance of commercially important indigenous tree species like Shisham, Toona, Semul etc. and highlighted the glaring concern of less seed production in the species. He stressed to take up studies on these aspects for productivity enhancement. Dr. U.K. Tomar, senior scientist and Head Genetic Division Arid

Forest Research Institute, Jodhpur, deliberated upon Mass Multiplication of trees by conventional and advance techniques-Limitation and advantages and discussed at length the application of conventional and modern bio-technological tools in tree improvement. As raising quality planting stock is the key for productivity enhancement and in view of this Dr. Sandeep Sharma, Scientist-F & Head Silviculture & Tree Improvement Division, revolved his talk on Modern Trends in Nursery Management for raising quality planting stock. Dr. Sharma discussed at length cost effective nursery management of poly tunnels, Vermi-compost besides highlighting the issues related with transportation of plants that determines the success of forestry plantations. Dr. Ashwani Tapwal, Scientist-E and & Head Forest Protection Division, highlighted the role and significance of mycorrhizae in tree species especially conifers. He described in detail the benefits of mycorrhiza in making forestry plantations successful, thus, contributing for productivity enhancement.

**On the second day** of the training (19.07.2017), the participants were taken to the field to show them various field activities undertaken by the institute related to Planting Stock Improvement. The participants visited **Western Himalayan Temperate Arboratum** established by HFRI at Potter Hill, Shimla. Dr. Vaneet Jishtu, Scientist-D, HFRI, Shimla took the participants around and showcased various activities in which different tree and medicinal plants have been planted in the Arboratum. Thereafter, the participants were taken to Shillaru where Dr. Rajesh Sharma Scientist-F, HFRI, Shimla demonstrated and explained the various activities carried out by the institute in establishing Seed production Areas (SPAs) of deodar. The participants were also taken to Shillaru, Kandyali and Narkanda to show them coniferous forests and Plus Tree selected by the institute and various other activities being undertaken in nursery for raising quality planting stock.

**On the third and final day** of the training (20.07.2017), Dr. K.K. Pramanik, Principal Scientist and Head, IARI Station Shimla talked about **Nursery production of temperate fruit crops** and described in detail various methods of propagation of fruit crops for raising quality planting stock which ultimately contributes for increased productivity. Prof. Sanjeev Thakur from Dr. Y.S. Parmar University of Horticulture & Forestry, Nauni, Solan delivered a talk on **Propagation of forestry trees by grafting** and described in detail about the work on grafting of Harad, Baheda and Amla. He described various grafting techniques used in producing grafted plants of these species. Shri. S.P. Negi, Conservator of Forests & Head Agroforestry & Extension Division, deliberated upon **Productivity enhancement through Agroforestry and Augmentation of Rural livelihood** and highlighted the roles of agroforestry in the state of Himachal Pradesh not only for productivity but also supplementing the rural lively-hood.

Shri G.S. Thakur DCF (rtd) talked about **soil and water conservation for sustainable development** and described and demonstrated to the participants about various measures taken by the forest department in its pursuit of afforestation activities. Shri Anil Joshi, Conservator of Forests, Hamirpur Circle informed the participants about new plantation strategy aiming at

productivity enhancement. He demonstrated various models of plantation strategy including raising and planting tall plants in various afforestation programmes.

The plenary and concluding session was Chaired by **Dr. K.S. Kapoor, Group Coordinator (Research), HFRI, Shimla**, when queries of the participants were addressed and views of the trainees were sought. The views of the participants echoed in unison while discussing about the importance of such trainings. In the end, Chairperson further highlighted the importance of such training programmes wherein personnel of other services have been involved not only to inculcate the feelings towards forestry activities but also to have integrated approach in future endeavours. The Chairperson distributed *Certificates of Participation* to all the participants. He also thanked the Ministry of Environment, Forests and Climate Change, Govt. of India for sponsoring this training programme and also to different participating departments for joining their hands to make this training programme a success.

At the end, **Dr. Sandeep Sharma**, Scientist-F proposed vote of thanks to the MOEF&CC, GoI for funding the training programme, Director, HFRI for his guidance, different departments for sending their representatives to the training programme, the distinguished resource persons from different institutes and everyone associated with the training programme for all the help and assistance during the training programme.

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## Some Glimpse of the Training Programme





