HIMALAYAN FOREST RESEARCH INSTITUTE CONIFER CAMPUS, PANTHAGHATI, SHIMLA-171 013 (HIMACHAL PRADESH)

FIVE DAYS TRAINING PROGRAMME ON "BAMBOO PRODUCTION, MANAGEMENT AND MARKETING" TO THE FARMERS UNDER BAMBOO TECHNICAL SUPPORT GROUP (BTSG) SCHEME OF NATIONAL BAMBOO MISSION (14-18th December 2015)

Himalayan Forest Research Institute, Shimla at the behest of ICFRE, Dehradun conducted five days training programme on Bamboo Production, Management and Marketing to the Farmers of Himachal Pradesh under Bamboo Technical Support Group Scheme of National Bamboo Mission, Govt. of India, New Delhi. The training was organized in the Conference Hall of Himalayan Forest Research Institute, Shimla from 14th -18th December 2015. The aim of the training programme infact was to promote bamboo cultivation amongst the farmers of the state of Himachal Pradesh. **Dr. Rajesh Sharma**, Scientist-F HFRI, Shimla and Coordinator of this training programme welcomed the participant on 14th December 2015 and briefed about the five day's training programme. **Dr. V.P. Tewari**, Director, Himalayan Forest Research Institute, Shimla inaugurated the training programme. Dr. Tewari in his inaugural address highlighted the significance of Bamboo and its multifarious uses and the role of farmers in spreading its cultivation in India. Dr. Tewari encouraged the farmers to actively participate in the discussion to make the training programme fruitful.

During the first technical session **Dr. Rajesh Sharma** deliberated broadly upon the importance of bamboos, utilization, marketing and research conducted on the species. **Dr. Vaneet Jishtu** in his talk explained different types of bamboos those are found in the state of Himachal Pradesh and also explained about the identification through their salient features. **Dr. K.S. Kapoor** Group Coordinator Research of HFRI, Shimla deliberated upon ecological, social and economic aspects of hill bamboos with special reference to the state of Himachal Pradesh. Dr. Kapoor also explained at length the significant role of hill bamboos in mitigating day to day requirements of the farmers and also highlighted the role of the species towards conservation of the fragile ecosystems of the state. After having briefed the participants about the importance of bamboos, and their socio-economic relevance the participants were shown **Documentary on Bamboos** prepared by ICFRE.

On the following day **Dr. Sandeep Sharma** Scientist and Head STI, Division HFRI, Shimla deliberated upon the practices being used in establishment of bamboo nursery. He meticulously

explained to the participants that how a bamboos nursery with quality planting stock can be raised. Dr. Sharma demonstrated through pictorial presentations the technique of macroproliferation in bamboos and addressed various aspects of managing bamboo nursery. His presentation was followed by the detailed presentation of **Sh. P.S. Negi** Scientist who touched the aspects pertaining mainly to the seed, as seed constitutes an important activity in forestry research and plantation programmes, Accordingly **Sh. Negi** deliberated upon the role of bamboos seeds its collection, viability and sowing for raising quality planting stock. He also emphasized on various methods of its storage.

In the afternoon session, **Sh. Jagdish Singh**, of the institute talked about different aspects of Agro-forestry vis-a-vis bamboos. He also explained about the propagation techniques of raising quality planting stock through vegetative means to the participants. Carrying forward this discussion, **Dr. Swaran Lata**, Scientist, HFRI, Shimla explained in detail to the farmers about production of bamboos and its management. As protection against insect-pests constitutes an important aspect in cultivation of any crop plant, **Dr. Ranjeet Singh**, Scientist and Head FPT Division, HFRI, Shimla discussed about various insect-pests that cause damage in bamboo crop and their control measures.

On 3rd day of the training programme **Shri Anil Joshi**, Conservator of Forests, Bilaspur Circle talked about marketing of bamboos. He exhorted the farmers to think beyond production of bamboos and asked the farmers to horn up their skills in making bamboo products. He also addressed the issues of farmers regarding cutting and transportation of bamboos. Dr. V.R.R. Singh, Additional PCCF, (FCA) Himachal Pradesh talked about management of bamboo forests and policy issues. Dr. Singh addressed the concerns of the farmers and informed about the latest development with regard to bamboo cultivation in the state and asked the farmers to take up bamboo plantation on their farmland on a large scale. Continuing with marketing concerns **Dr**. Ranjeet Kumar Scientist, HFRI Shimla, shared his experiences of North-eastern region with the participants and demonstrated at length to the participants various bamboo products being manufactured by the people in North-east India and also in China. He encouraged the participants to learn manufacturing of various articles of bamboo. In the afternoon session Shri S.S. Kataik, IFS, Deputy Director, Forest Survey of India, Shimla talked about bamboos and related them with the livelihood issues and also shared his field experiences with the farmers. Dr. Pawan Kumar Scientist, HFRI, Shimla explained about various insect-pest incidences I bamboos that cause damage to bamboo seedlings in the nursery and their control measures were also discussed by the scientist. The various queries of the participants with respect to insect-pests found in their nurseries were duly addressed by Dr. Pawan Kumar. Late in the afternoon the participants were also shown the documentary on Hill Bamboo and products made from hill bamboos.

On 4th day **Dr. Rajesh Sharma** took all the participants to the field at Dhadyarghat where the institute had earlier raised Tissue Culture (TC) and Stem Cutting (SC) raised demonstration plantation of *Dendrocalamus hamiltonii* under DBT funded project. The participants were shown different plots of TC and SC raised experimental and demonstration plants and how bamboo plantation had helped arresting the incursion/further spread of *Lantana* was also discussed. The comparative growth performance of TC and SC plants was shown and demonstrated to the farmers. The farmers were also taken to Bamboo nursery of the State Forest Department and practically demonstrated to the farmers the macro-proliferation technique and the quality planting stock of bamboo species in their nursery.

The 5th day was the concluding day for this training programme. **Dr. Ashwani Tapwal**, Scientist, HFRI, Shimla delivered a talk on diseases in bamboos and elaborated in detail on different aspects of diseases and their control measures. Dr. Tapwal also addressed the queries of the farmers pertaining to diseases in other crop plants. **Dr. R.K. Verma** Scientist, HFRI, Shimla talked about various uses of bamboo, products and value addition and demonstrated through pictorial presentations various bamboo products in use. **Shri Surinder Kumar**, APCCF (Admin) Himachal Pradesh talked about management issues in bamboo crop and addressed queries of the farmers regarding the transportation and marketing.

The technical session was followed by general discussion with the participants in which all the faculty of the institute participated and addressed the concerns of the farmers. The farmers were also asked to give their opinion about the training programme in which **Shri Bhupesh Thakur** and **Shri Swami Thakur** requested to include practical training on product manufacturing and value addition. In the end the farmers were given certificate of participation by the **Dr. V.P. Tewari**, Director, HFRI, Shimla. **Dr. Tewari** in his concluding address not only thanked the farmers for their active participation in the training programme but also ensured to take their cause of practical training programme in bamboo products to higher authorities. The training programme ended with the vote of thanks proposed by **Dr. Sandeep Sharma**, Scientist, HFRI, Shimla.

Some Glimpses of the Training Programme













