

**Training on Bamboo Value Addition and Utilization conducted at Talwara,
Punjab on 11th & 12th December 2012 By Forest Products Division, Forest
Research Institute, Dehradun**

A team of five scientists and five technical staff members comprising of Dr. Sadhana Tripathi, Scientist-F & Head; Dr. Kishan Kumar, Scientist-F; Shri. N K Upreti, Scientist-F; Shri. D P Khali, Scientist-E from Forest Products Division, and Shri. Rajesh Bhandari, Scientist-E, Timber Engineering Discipline, Forest Research Institute, Dehradun conducted training on “Utilization of bamboo and its value addition” at Talwara, Punjab on 11th and 12th December 2012 for two groups of trainees identified by the Punjab Forest Department. A total of 57 trainees participated in the training programme. Training material consisting of a manual on bamboo technologies, writing pad, pen and a folder was also distributed by FRI to the trainees.

Lectures in Hindi using power point presentations were delivered to the trainees on how to enhance the durability of and add value to bamboo and products. Apart from this, the use of bamboo for various structural purposes and also use of bamboo and other fibrous waste materials for different end products was also explained in detail during the lectures.

The trainees were apprised on the various chemical treatment techniques adopted for bamboo preservation like the steeping, diffusion, sap displacement and Boucherie methods which will enhance the service life of bamboo and bamboo products. The use of fire-retardant treatments was also discussed in detail. It was elaborated that by opting very easy methods of treatments and by spending very small amount of money, life of bamboo and thatch can be enhanced many folds.

Trainees were also explained about chemical seasoning of round bamboo for avoiding surface wrinkles and cracks at nodes in handicraft items, techniques and potential of bamboo boards, lantana boards, surface coloration of bamboo articles using ammonia fumigation and tree bark extracts, cluster processing for bringing delicateness to bamboo slivers for the benefit of artisans involved in basketry works, relative benefits of bamboo over timber and methods of joining bamboo sections for structural uses. These lectures were delivered in the forenoon on both the days. The trainees eagerly interacted with the faculty with queries on treatment costs, processing

methods, availability of processing machines, raw materials etc. during the lectures. Bamboo technologies were also displayed on charts at the venue.

In the afternoon of both the days, practical demonstrations on chemical treatment of bamboo by Boucherie technique, chemical seasoning of bamboo handicrafts using urea, use of ammonia fumigation technique and bark extract for colouration of bamboo and effectiveness of fire retardants on bamboo and thatch grass were given to the trainees. Bamboo composites, furniture made of lantana composites, treated bamboo hut, small structure made of bamboo showing effective utilization of bamboo etc. were also displayed and explained in detail to the trainees.

In the evening of 12th December 2012, FRI's team had a detailed discussion with Shri Ratnakumar, CF, Shiwalik Circle, Punjab Forest Department in the presence of Shri Surjeet Singh, DFO, Desuiya regarding the techniques that were explained to the participants during the training. Shri Ratnakumar requested for transfer of bamboo technologies to users by the FRI through PFD. In principle, it was agreed that FRI will prepare some proposals for transfer of bamboo technologies including procurement of necessary bamboo processing machineries for PFD who will in turn implement the proposals through private entrepreneurs with the help of FRI.



