

## “Utilization of Hardwoods” for pulp and paper symposium held in F.R.I., Dehradun on 1st and 2nd August, 1968.

With the rapid growth of Pulp and Paper industry in our country, to meet the increased demand of cellulosic raw materials, various attempts are being made to bring into the use of Hardwoods for Pulp and Paper making so that the limited resources of Bamboos can be conserved. In order to enlighten the Industry about the availability of the Hardwoods in the forests and the various research works done by F.R.I. to show the technical feasibility of manufacturing Pulp and Paper from Hardwoods a Joint Convention was arranged under the auspices of F.R.I., Dehadun so that the Forest people, Paper makers and the Research Workers can discuss matters on a common forum about the utilization of Hardwoods for Pulp and Paper making.

About 80 delegates—30 from the Paper Industry, 30 from the Forest Circle and 20 from the Cellulose branch of F.R.I. attended the symposium which was held in the “Convocation Hall” of the Institute. Before the symposium the delegates were shown round and small exhibition in which various works done by Cellulose and Paper Branch of F.R.I. and the “Pre-investment Survey of Forest resources” were displayed.

Mr. B. Sivaraman, Secretary, Department of Agriculture and Community Development inaugurated the Symposium. Mr. T. N. Srivastava, President, F.R.I. welcomed the delegates and explained the object of arranging such symposiums. He also briefed the works done by F.R.I. on hardwoods. He requested Mr. Hari Singh I.G. Forests to preside and conduct the Symposium.

In all 20 Papers were read in the Symposium. The pattern of Papers read were as follows :

(1) Availability of Hardwoods (Mostly by Forest people) ...	7 Papers
(2) Research work done on Hardwood species by F.R.I. and others ...	6 Papers
(3) Industry's experience on the use of Hardwoods (Bengal & Star) ...	2 Papers
(4) General ...	5 Papers
Total : ...	20 Papers

The Symposium started with Mr. R. P. Bhargava giving Star Paper Mills' experiences on the use of Hardwoods. He gave in details section-wise experience by using Hard woods. After the discussions, on this paper the delegates were taken to Star Paper Mills, Saharanpur to see themselves how hardwoods are being used. They also visited the school of Paper Technology, Saharanpur.

The Second day of the Symposium was started with a tight schedule. As much as 19 papers were rushed through. A long and lively discussion followed the paper presented by Mr. K. S. Bhargava of M/s. Bengal Paper Mills, giving their mill's experience on the use of hardwoods. Many interesting points were discussed and clarified. Other papers on the research work done on particular species of Hard woods were presented by F.R.I. After the symposium the delegates were shown round the pilot plant of F.R.I.

A committee was formed to formulate the recommendations on the basis of discussions held in the symposium.

The Committee reviewed the discussions made in the Seminar held on preceding two days and decided that the following recommendations be made to the Government which should be the guiding principles in deciding the growing use of hard woods by paper industry, so that the dwindling bamboo resources be rationally conserved in time :

- (1) For the development of pulp and paper and allied industries, increasing use of hardwoods be made.
- (2) To encourage the use of hard woods, suitable **incentive** should be given to pulp and Paper mills, using them. (No limit minimum or maximum, was fixed by the Committee).
- (3) Plantations of fast growing, broad leaved species suitable for pulp and paper making should be taken up in concentrated areas to be set apart for the Industry.

- (4) Since hard wood resources of the country have not been surveyed so far, a proper pre-investment survey of the hard wood resources should be quickly made, showing the appropriate representation and total availability.
- (5) Since pulp and paper making properties of many hardwood have not been investigated the Cellulose and Paper Branch of F.R.I. and the industry should take up experiments on the suitability of various woods and mixtures of hard woods as they grow in forests, by various processes, particularly high yielding, from different regions for the manufacture of industrial and cultural papers and rayon.
- (6) Since hard woods are short fibred, and would require addition of long fibred pulp, proper conservation, scientific management and

propagation of bamboo and coniferous shall be immediately undertaken by the Forest Dept of different states,

- (7) Because there are difficulties in harvesting, sorting, transporting and handling of the raw material (hardwoods) of individual species growing in mixed hard wood forests, the mixed pulping of hardwoods need be practised in mills as far as possible.

IPPTA has the pleasure in publishing few of the papers presented in the Symposium (some in this journal and others to follow) which may be of interest to our readers.

**M. M. MENON,**  
Hon. Executive  
Secretary/Editor.