5. SUBMISSION OF ABSTRACTS

One page abstract (500 words) including the title, author'(s), affiliation and key words should be submitted to the Organizing Secretary **by 25**th **Jan, 2016.** Abstract should be prepared in MS Word. Acceptance will be conveyed by 1st Feb 2016.

Registration fee: An amount of Rs 1000/ per delegate. For students, registration fee is Rs 500/ per student.

There is no registration fee for the ICFRE / NABM employees.

6. POSTER PRESENTATION

The dimension of the poster should be a maximum of 90 cm wide and 120 cm high. The posters should be informative, clear and attractive. Posters should be legible from a distance of 1-2 m. Materials for fixing the posters will be provided by the organizers. Mailed posters will not be accepted.

7. **Display in Stalls/ Participation in Crafts Mela:** An exhibition of bamboo products is also being organized during the seminar. Interested participants are requested to contact the organizing secretary. The charges for putting up one stall will be Rs 12,000/-

8. Institute is planning to bring out an Abstract cum Souvenir book wherein few advertisements will be published.

Rates for advertisement: Rs. 12000/ for back cover page

Rs. 9000/ for two inner pages Rs. 7000/ for colour page inside the book.

Rs. 5000/ for inner black and white page

For more information, please contact :

Dr. Pankaj Aggrawal, Organising Secretary either by post or email at <u>pankaj@icfre.org;</u> <u>pankajkamal100@gmail.com</u> or Dr Syam Viswanath, Co-organizing Secretary (sviswanath@icfre.org; syam.viswanath@gmail.com) PATRON

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Shri Puneet Pathak, IFS, Mission Director, Karnataka State Bamboo Mission

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Dr. Ashwani Kumar, IFS, DG, ICFRE

Dr. K. Sundar Naik, Chairman, Bamboo Society of India Dr. N. Bharati, Director, Grow More Biotech Ltd.,

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NATIONAL SEMINAR ON "BAMBOO RESERVE MANAGEMENT AND ADVANCES IN UTILIZATION OPTIONS"

(23rd – 25th FEBRUARY 2016)

Venue: Institute of Wood Science and Technology, Bengaluru









INSTITUTE OF WOOD SCIENCE AND TECHNOLOGY

(Indian Council of Forestry Research & Education) Bengaluru-560 003, Karnataka, India

1. BACKGROUND

No other member of the plant kingdom has such myriad uses which makes it mankind's unique companion from cradle to graveyard than the humble bamboo. The mystique and beauty of bamboo have captivated human imagination from time immemorial. In many Asian civilizations, bamboo symbolizes human soul and humanity is believed to have emerged from a bamboo culm. However, this humble bamboo is undergoing a transformation from the perception of 'a poor man's timber' to a much sought after lucrative 'green gold'. Bamboo is increasingly recognized as a renewable bioresource that can spur economic growth, sequester carbon from atmosphere at a much faster rate, provide energy, food, clothing and shelter, besides several value added products, which has utility in our daily life.

India is the second richest country in bamboo genetic resources after China. Bamboo occupies nearly 12.8 percent of total forest area in the country. The fast growth, short rotation period and wide adaptability to varied soil and climatic conditions confers a distinct advantage to bamboo. Out of about 1250 bamboo species found world wide, India is bestowed with about 136 species in 23 genera. Bamboo has more than 1500 documented uses and play a significant role in soil and water conservation in natural ecosystem. Bamboo also has potential to substitute wood in many ways. The use of advanced technologies allow use of bamboo as a lifestyle product in a way unimaginable a couple of decades ago. All this has increased demand for this bio resource much beyond its current availability. The Government of India has identified 18 bamboo species for its potential industrial importance. However, strategic planning in ensuring uninterrupted supply of the resource has been hampered by lack of information on predicting the gregarious flowering behavior of most bamboo species. Non availability of quality planting stock of some of the choice species has also hindered commercial cultivation in farmlands and largescale private commercial ventures. There has also been a significant lacunae in cropping technologies related to potential intercropping combinations in bamboo, extent of competition for resources, above-ground and below-ground interactions in bamboo based cropping systems. Bamboo is also being actively considered as a biomass source for bioenergy plantations, bio resource for ethanol

production, new age panel products in furniture making, as a nutraceutical, composite making for use in decking, cladding and in interiors. Besides this, the traditional use in agarbatti stick making, basketry and handicrafts also consume significant quantities of bamboo. The ecological significance in land reclamation, erosion control and bio-drainage are also receiving increased attention. Documentation of bamboo flowering, post flowering management, regeneration, potential in agroforestry, sustainable development and advancement in utilization of bamboo resources are essential for bioresource development and its sustainable utilization. In the above background a National Seminar on "Bamboo Reserve Management and Advances in Utilization Options" is being organized during 23-25 February, 2016 by the Institute of Wood Science and Technology, Bengaluru. The seminar is supported by Bamboo Technology Support Group (BTSG) of Indian Council of Forestry Research and Education (ICFRE) with financial support from National Bamboo Mission(NABM), Govt. of India. New Delhi.

2. THEMES OF THE SEMINAR

Theme 1. Bamboo Flowering

a) Documentation of gregarious flowering in bamboo species

Zone-1 (North-East India): Assam, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya and Sikkim.

Zone-2 (North India): Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Haryana, Punjab and Delhi.

Zone-3 (East India): Bihar, Jharkhand, West Bengal and Odisha.

Zone-4 (West and Central India): Rajasthan, Gujarat, Madhya Pradesh, Chhattisgarh and Maharashtra.

Zone-5 (South India): Kerala, Tamil Nadu, Pondicherry, Andhra Pradesh, Telangana, Karnataka, Goa, Andaman and Nicobar Islands and Lakshwadweep.

b) Post flowering management

Improvement interventions, removal of dry clump/culms and its utilization, seed collection and raising of nursery, natural seed predation, rehabilitation of flowered area, pre and post flowering technology advancement.

c) Regeneration status

Factors affecting seed dispersal, viability, natural regeneration, assessing seedling emergence and seedling survival, stress, predation and abiotic factors, competition and plant association.

Theme II. Agroforestry potential of bamboo

Livelihood security, community based management and entrepreneurship, intensive management practices in commercial plantations, clump management, selection of appropriate bamboo species for agroforestry, above ground and below ground interactions in bamboo based agroforestry models, improved genotypes to enhance productivity, technologies for the production of quality planting material (QPM), certification of clones and planting material, issues in harvest, transit and marketing.

Theme III. Advances in bamboo utilization patterns

Bamboo composites, bioenergy from bamboo, panel products, thermal modification, eco friendly bio-preservatives, bamboo shoots as nutraceutical and new age health products, bamboo in handicraft Industry and housing sector, bamboo as a substitute for cane in furniture industry, design of innovative lifestyle products, bamboo clothing, application of nanotechnology in bamboo sector.

Field trip: Grow More Biotech, Hosur, (80 kms from IWST)

3. VENUE AND CLIMATE

The Seminar will be held at the IWST, Bengaluru, which is 5 km from Majestic bus stand, city railway station and 35 km from Kempegawda International Airport (KIAL) Devanahally. Weather at Bengaluru during February will be pleasant with day temperature around 25-28°C. Light woolen clothing may be required in night.

4. ACCOMMODATION

Limited accommodation is available in IWST guest house/hostel that may be arranged on 'first come first served basis'. Good quality budget hotels are also available in Bengaluru on affordable cost. Participants will have to bear the accommodation charges. For accommodation enquiries/requests may be sent to Dr. Anil Kumar Sethy, Scientist – D at aksethy@icfre.org