

## **Workshop on “Status of Eucalyptus plantations – Myths and Reality”**

**(28<sup>th</sup> May 2019)**

Forestry has an important role to play in combating climate change. Loss of natural forests has caused serious consequences like global rise in temperature. Rising concentration of atmospheric greenhouse gasses are affecting climate in the form of increase in mean temperature and frequency and severity of drought. Planting trees outside forests is resorted to mitigate the effects of climate change, but key issue encountered is survival and productivity of plantations. National Forest Policy 1988 mandated to reduce pressure on forests for fuel wood, fodder and industrial raw material requirement, through plantations under farm forestry and social forestry initiatives. Though several species are used, the response to harsh environmental conditions and suitability for various end uses have a major impact on the success of plantation forestry. Introduction of eucalyptus as plantation species has been highly successful worldwide. Eucalyptus is widely cultivated as they can be grown in short rotations, and the adaptive capacity is also reasonably high.

Eucalyptus is now a major tree crop world over. This genus has several attributes that enable its wide acceptance and domestication as an exotic tree crop to suit the climatic conditions, and requirements of different end products. Extensive research has been carried out to breed new varieties employing both traditional and molecular breeding approaches. It is a much sought after raw material for several industries especially pulp and paper industry. Eucalyptus was introduced in India in later part of 18<sup>th</sup> century, and currently India is one of the largest growers of eucalypts with majority of the planted area in farmlands. High yielding eucalyptus clones have enhanced the wood yield and economic security of farmers in dry arid regions where agriculture has been severely affected by unpredictable climatic changes. Eucalyptus is preferred by farmers due to rapid growth rate and adaptation to a wide range of sites. They are capable of establishing in regions that have long dry seasons and soils of poor nutrient status. Every year around 1.5 lakh ha of eucalyptus plantation is raised in India, creating employment of over 70 million in rural areas.

There are some concerns about eucalyptus depleting ground water resources, though several studies have reported that ground water levels and soil moisture regime are not adversely affected by eucalyptus cultivation. Many studies have reported that eucalyptus are adapted to dry habitats as they are very efficient in water utilisation by preventing water loss through low transpiration rate and efficient stomatal control. In 2011, the Government of Karnataka has banned eucalyptus planting in forest and government land. Subsequently during 2017, the technology and incentives to eucalyptus growers, farmers and private organization was stopped. As there are no scientific studies to prove the harmful effects of eucalyptus on ground water, it is felt necessary to establish the scientific truth regarding eucalyptus plantations.

In this context, it is proposed to organise a one-day workshop on “Status of Eucalyptus Plantations – Myths and Reality” involving professional foresters, academics, plantation corporations, researchers, scientists eucalyptus growers, policy makers and other stake holders to deliberate on ecological issues, misconceptions and reality about eucalyptus plantations. The workshop will be organized at the Institute of Wood Science and Technology (IWST), Bengaluru on May 28, 2019.

The workshop programme comprises of invited lectures, experience sharing and panel discussions on scientific assessment of eucalyptus plantation including status of plantations across the country, productivity, ecological issues, water balance, nutrient analysis, environmental consequences, agro-forestry, and economic returns etc.