

## **FIVE DAYS SPECIALIZED TRAININGS**

**on**

***“Agroforestry and Land Management”***

***and***

***“Nursery and Plantation Techniques”***

**[16 – 20 February, 2015]**

**Agroforestry is an important livelihood option of today to improve the economy of farmers and balance the ecosystem. An effective application of agroforestry on farmland requires awareness and technical knowhow.**

**It is well known that a healthy seedling develops into a healthy tree in agroforestry as well as other land use systems. Hence, the knowledge of improved nursery and plantation techniques is necessary for growing a quality planting stock.**

**Keeping in view the need to train the frontline staff of forest department on these subjects, the Forest Research Institute (FRI), Dehradun conducted two concurrent training programmes of 5 days duration from 16th- 20th February, 2015 on “Agroforestry and Land management” and “Nursery and Plantation Techniques” for Foresters and Forest Guards of Bihar State. The training courses were sponsored by the Bihar Forest Department wherein Foresters and Forest Guards from different Forest Divisions of the state participated. These training courses conducted as a part of Haryali Mission launched by Bihar Government to increase the forest cover of the State.**

**Dr. P.P. Bhojvaid IFS, Director Forest research Institute (FRI), Dehradun inaugurated the trainings on 16th February, 2015 in the Conference Room of Extension Division. In his inaugural address he stated that agroforestry has great scope in Bihar as the state is rich in basic resources required for agroforestry plantations. He emphasized that if wood based industries, like plywood factories, are established in the state, there will be huge opportunities of *in-situ* employment generation for the youths as well as farmers. The farmers will also get proper price of their agroforestry produce. This will also enhance the potential of nursery development, plantation and agroforestry in the state. He said that agroforestry will bring greatest benefit to the state if wood produced in the state is locally manufactured into finished products. Shri Sandeep Kujur,**

**Head, Extension Division presented the welcome address. While welcoming the participants and the dignitaries present, he said that the participants should not only learn and improve their own skills, but they should also act as master trainers and train their fellow workers. He also emphasized on promotion of agroforestry in Bihar State. Shri Kunal Satyarthi, Head, Silviculture Division offered vote of thanks. He said that the Forest Research Institute is the treasury of forestry based knowledge and trainees should gain more and more knowledge from these trainings.**

**During technical sessions of both the trainings, subject specialists made interaction with trainees on following topics:**

- **Basic concepts of agroforestry**
- **Shisham based agroforestry on degraded land**
- **Testing of suitability of soil for agroforestry**
- **Propagation of *Melia composita* and its plantation under agroforestry**
- **Production of improved quality plants of Poplar, Eucalyptus and Shisham**
- **Storage and management of seed of agroforestry species**
- **Establishment of Hi - Tech Nursery of agroforestry species and their management**
- **Insect pests and diseases of agroforestry species and their control measures**
- **Quality testing of medicinal plants of an agroforestry system**
- **Plantation and after care**
- **Superior clones of Poplar and their plantation under agroforestry system**
- **Vegetative propagation of Bamboo**
- **Role of medicinal plants in agroforestry**
- **Silviculture of medicinal plants and their farming**
- **Tissue culture technique**
- **Genetic technique of tree improvement**

- **Germplasm of Poplar**
- **Forestry – An option to mitigate the climate change**

**Besides interactive talks with subject experts, nursery and field visits were also arranged for all trainees under which, they visited Central Nursery, Museums, Tree Seed Laboratory, Tissue Culture Laboratory, Bambusetum, Botanical Garden of FRI and agroforestry plantations and wood-based industries near Yamunanagar. A visit to Metro Plywood Industry, Yamunanagar (Haryana) was also arranged for trainees. The trainees also visited Hi - Tech nursery of Star Paper Mill where a demonstration on vegetative propagation of Eucalyptus was given and nursery of poplar was shown.**

**A common interaction session was arranged for discussion on different issues on agroforestry, land management, nursery and plantation techniques where trainees and subject specialists shared their views on various aspects related to silviculture of important species and their management. The trainees appreciated the training programme in their feedbacks. All trainees were given certificates of participation.**

**During closing ceremony, Shri Sandeep Kujur, Head, Extension Division and Shri Kunal Satyarthi, Head, Silviculture Division of FRI addressed the trainees and mentioned that whatever learnt from these trainings should be extended to the common people so that they can take benefit of technologies of the Forest Research Institute.**

**Dr. Dinesh Kumar, Scientist-F, Silviculture Division offered the vote of thanks to all participants. The anchoring of the programme was done by Dr. Charan Singh, Scientist-D, Extension Division.**

**Dr. Paramjeet Singh, Scientist-F, Shri P. K. Gupta, Scientist-C (Retd.) and Shri Rambir Singh, Scientist-C of Extension Division and resource persons were present on this occasion. All scientists/ officers/ officials of Silviculture and Extension Division worked and coordinated well for management of both the trainings.**

## **Glimpses of the training**



**Director, FRI addressing the trainees**



**Head, Extension Division, FRI addressing the trainees**



**Interaction with subject expert**



**Interaction with subject expert**



**Demonstration of vegetative propagation of Bamboo**



**Visit of FRI Central Nursery**



**Visit of Agroforestry field in Yamunanagar (Haryana)**



**Interaction with progressive farmer of Yamunanagar (Haryana)**



**Interaction with progressive farmer of Yamunanagar (Haryana)**



**Visit to Plywood industry in Damla, Yamunanagar (Haryana)**



**Visit to Hi - Tech nursery of Star Paper Mill in Saharanpur (UP)**



**Distribution of certificate**



**Distribution of certificate**



**Trainees and Faculty members**