

**PROCEEDINGS OF IN HOUSE RESEARCH SEMINAR ON  
“CLONAL DEVELOPMENT PROCEDURE OF AGROFORESTRY TREE SPECIES”  
ON 30.08.2018  
INSTITUTE OF FOREST PRODUCTIVITY, RANCHI**

An in-House seminar was held at Institute of Forest Productivity (IFP), Ranchi on 30.08.2018. The programme was inaugurated by Dr. Yogeshwar Mishra, Scientist-F and GCR, IFP, Ranchi and who also introduced the theme of the seminar. It was followed by the address of Dr. Sanjay Singh Scientist-F and Head Extension Division who emphasized about the role of Clonal Development Procedure of Agroforestry Tree Species.” All heads, scientists, technical officers and researchers participated in the research seminar.

Sri Aditya Kumar Scientist –D, Genetics Division, IFP, Ranchi made a presentation on the topic describing the role and importance of deployment of clonal procedure in agroforestry system and tree species regenerated through clonal technique performed in different agroforestry models on Bihar. Based on the presentation and discussion held following key areas were marked for future research need.

**Identification of Research needs:**

1. It is required to collect and conserve the germplasm of Agroforestry Tree Species for future tree improvement programs.
2. It is required to introduce productive and economical tree species under agroforestry systems in the region.
3. It is required to assess genetic diversity present in the collected germplasm of agroforestry tree species using morphological and molecular markers.
4. It is required to assess field performance of collected genotypes of agroforestry tree species through multilocation field trial and identify superior clones/genotypes.
5. It is required to release productive, suitable, trait specific, biotic and abiotic stress resistant/tolerant clones/varieties of agroforestry tree species for the region.

**Formulation of future strategies/road map:**

1. Germplasm of *Melia dubia*, *Populus deltoides* and *Dalbergia sissoo* have been collected and conserved in the germplasm bank of IFP Ranchi and also introduced *Casurina spp.*, *Salix*, *Ulmus villosa* in the Bihar to diversify the agroforestry systems. The Multilocation field trials and adaptation trials of these species have been established in Bihar to identify superior and productive genotypes. Superior clones/varieties will be released for future planting under agroforestry systems.
2. The genetic base of these agroforestry tree species will be broadening through introduction of more genotypes from outside.

## **Networking research options and opportunities:**

1. The networking has been done with State Forest Department and farmers of Bihar. Focus has been given to carryout participatory plant breeding. It is required to associate scientists from ICAR institutes and agricultural universities in the clonal/ varietal development and extension programs, which not only increase the quality of research but also helps in dissemination of knowledge to the stakeholders.



**Talk on the topic by the presenter and discussion during presentation**