



# GOVERNMENT COLLEGE,

## SANJAULI

## SHIMLA-06, H.P.

A REPORT

TRAINING & DEMONSTRATION PROGRAMME FOR OTHER STAKEHOLDERS

22ND - 24TH OCTOBER, 2025.

ON SEED, NURSERY & PLANTATION TECHNIQUES OF OAK SPECIES.

VENUE: ICFRE - HFRI, SHIMLA.

#### Introduction

A three-day training & demonstration programme was organised at the ICFRE-Himalayan Forest Research Institute {HFRI}, SHhimla. The programme focused on seed nursery amd plantation techniques of oak species.

The event brought together experts, scientists, & participants from various sectors to promote awareness, build technical knowledge & encourage community-level participation in medicinal plant cultivation & utilisation.



The following students from Department of Biosciences of Government Degree College, Sanjauli participated in this programme:

- Archit Verma.
- Sparshit Thakur.
- · Aryaveer Rathour.
- Meenakshi Verma.
- Sakshi Sharma.



#### Objectives

- ° To studyinitiatives undertaken by HFRI in forest conservation & management.
- ° To observe the functioning of various research divisions & laboratories.
- ° To understand the institute's contribution to community-based forest management & climate change mitigation.
- ° To interact with scientists & researchs to learn about current projects & methodologies.

## Overview

of Forestery Research & Education {ICFRI}, conducts Research & development activities in forestry & allied disciplines. Located in Shimla, Himachal Pradesh, the institute focuses on ecological restoration, sustainable forest management, & livelihood enhancement for local communities through scientific interventions.

#### Research Divisions Visited

## 1. Siviculture & Forest Management Division

This division focuses on developing sustainable forest management practices. Research activities include regeneration studies, nursery techniques, growth analysis of native tree species, & afforestation of degraded forests. Practical demonstration of seedling propagation & planting methods were observed.

## 2. Forest Ecology & Climate Change Division

This disvion studies related to the ecological Impacts of climatic change on Forest ecosystems. Researchers shared findings on phonological changes, carbon sequestration, biodiversity assessment, & remote sensing-based ecological mapping.



### 3. Forest Protection Division

This Divisions deals with diagnosis & management of Forest pests, pathogen, identification & integrated pest management, strategies were showcased. Discussion on biological control measures were also head.

## 4. Genetics & Tree Improvement Divisions

This division works on genetic enhancement of economically & ecologically important tree species. Clonal propagation techniques, improved seed sources, & long term genetic resource conservation methods were prevented.

#### 5. Field Demonstrations

A field visit to experimental sites provided practical exposure to silviculture operations, watershed management, soil conservation techniques, & contour trenching methods. The team observed mixed-species plantations, bioengineering approaches for slope stabilization, & vegetation-based strategies for enhancing ecosystem resilience.

#### 6. Interaction with Scientists

The interaction sessions provided deep insights into real-world forest management challenges in Himalayan landscapes. Discussions focused on :

- Human-wildlife conflict.
- invasion species control.
- Role of local communities in conservation.
- Traditional ecological knowledge.
- Climate-resilient forestry models.

These exchanges helped understand how integrating indigenous knowledge with modern modern forestry research leads to sustainable outcomes.

#### 7. Conclusion

The visit to HFRI Shimla offered a comprehensive understanding of research-based forest conservation strategies adopted in the Himalayan region. Exposure to laboratory demonstration, field techniques, & expert consultations enhanced awareness about sustainable forestry practices. The programme successfully reinforced the importance of scientific research, community participation, & policy support in achieving long-term forest management goals.

