

NURSERY

- Area where plants are raised for further planting-out
- Types
 - Seeding Nursery
 - Transplant Nursery
 - Generally both together

- **Permanent Nursery**
- Log term Supply
- Near the habitation
- Near the staff quarters
- Centrally on the Roads for supply to other consumers also

- Temporary Nursery
- Used up to 3 seasons
- General maintenance from Oct-Nov to July (Rainy Season)
- Remaining plants are removed to other nurseries
- Semi permanent Nursery
- Extension Nursery
 - Basically storage places



Plantation Monitoring System

Environment, Forest and Climate Change Department, Uttar Pradesh

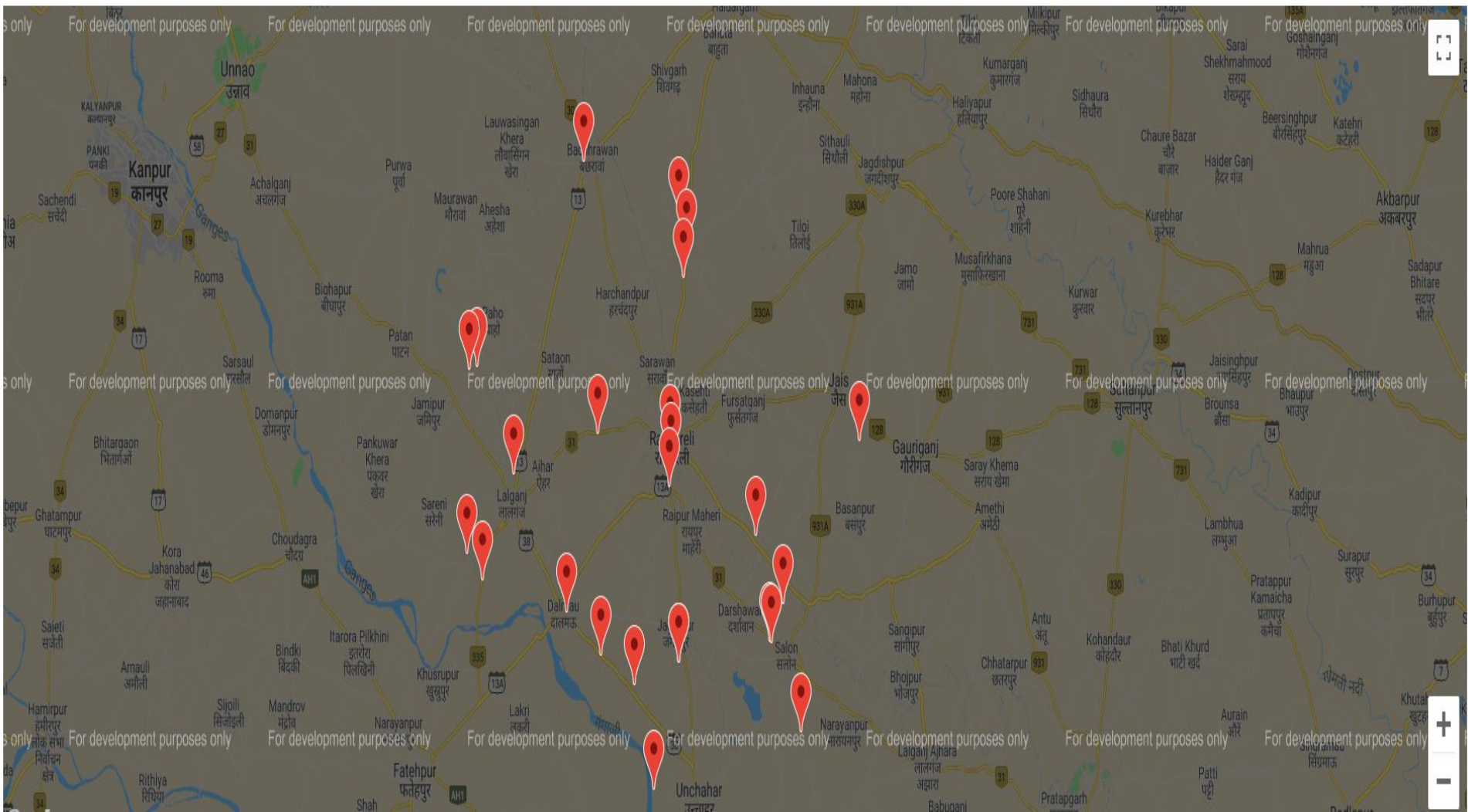


Division Name

रायबरेली वन प्रभाग (DFO Raibareilly) ▼

Search

25 Nursery Locations



Importance of Nursery

- Seed Year Varies
- Growth patterns
- Success of various plantation – Urban forestry
- Seedlings of Uniform age
- Exotic species

Site Selection

- Connecting with Road
- Supply of Labour
- Well drained soil – Loamy
- Sandy & Clayey are not preferred
- Assured water supply

Fencing

- Generally Barbed wire fencing
- Up to 7 strands with Angle iron
 - Eucalyptus poles are also used
 - Trenches with live hedges are also used for temporary nurseries

Area

- Generally 40 % area is used for way & means
- Approximately 1 ha can produce 1 lakh plants



Lay out

- Main Road
- Serving path / Bridle path
- Rectangular Blocks
- Plots – 10 to 12 m wide
 - Divided into standard nursery beds
 - Bed size ; Length - 12 m & width – 1m
Generally 45 cm deep
 - Between 2 beds – bunding of 1 ft.

Operation for New Nursery

- Select the area
- Go for the agreement – land status
- Fencing
- Light fire to clean the area /Brush cutting
- Harrowing – manual as well as by tractor
- Plotting
 - 12m x 1m plots
 - Beds for container plants
 - Plots for ball plants
 - Plots for transplanting

- Seed beds
 - Ankuran kyari
- Raised beds
- Pits as seed beds for teak, Arjun and Kanji
- Sowing in Seed Bed
 - Broadcasting
 - Mixture of soil & manure
 - Watering by manual labour using water can
- Shading
 - Protection against the Sun
 - Protection against Frost
 - Protection against Rain & Hail



Filling up of Polythene Bags

- 1;2;4 mixture
- Manure;sand;soil
- Generally soil sand and manure is brought from out side
- Soil is broken well & mixed
- Insecticide mixing
- Sieving - 2 x 2 mm size mesh
- Slow filling up
- Punch holes at the bottom
- Potting mixures
- Vermicompost
- Mycorrhiza
- <https://youtu.be/4anFtBIAMEg>





<https://www.youtube.com/watch?v=hWlkJbiizRE>

- Seed sowing or pricking
- <https://www.youtube.com/watch?v=QO8r6KadWA4>
- [Teak Nursery - English - YouTube](#)
- Watering for Nearly one month manually
 - Watering in morning and evening
- Weeding at least once in 15 days
 - Provision in estimate for once in a month
- Shifting of the plants once in 3 months
 - Khair and fast growing species -much earlier
 - Root coiling, root pruning
 - General watering is done by flood irrigation



पौध संरक्षण, पर्यावरण सुरक्षा
वन एवं वायु जीव विभाग उत्तर प्रदेश
गोविन्दपुर माधव पौधशाला
क्षेत्रफल - १८६ हे.
इलाका - सीता
वन एवं वायु जीव विभाग - लखनऊ

- Grading
- Hardening before planting season
 - Shoot trimming,
 - Culling



- Ball plants
 - Conversion to ball plants
 - Transplanting
 - Root cutting
 - Preparation of pindi
 - Spacing



- Equipments in the Nurseries
 - Watering can
 - Scissors
 - Secateurs
 - Germination trays
 - Plant carrying trays
 - Sieves

- Planning
- Seed supply
- Polythene bags
- Boards
- Name plates for each bed



- Mist chamber
- Poly houses
- Tissue culture
- High tech nurseries
- High tech low cost nurseries
- Vermi-compost
- Culling out
- Nursery register

- **Clarification**
 - **Shade House**
 - **Root cutting**
 - **12 feet plants**
 - **Documentation in nursery**
 - **Specifications of Targets**

क्यारीवार मासिक गणना प्रपत्र

क्यारी संख्या (थैली पौध के लिए)-

प्लाट संख्या (पिण्डी पौध के लिए)-

गणना माह/गणना तिथि	प्रजाति का नाम	उँचाईवार पौधों की सं०					थैली पौध सं० योग	पिण्डी पौध सं० योग	अभ्युक्ति माह विशेष में किये कार्य यथा शिफ्टिंग, ग्रेडि प्रूनिंग, मृत पौधों को बदलना, निराई, गुड़ा सिंचाई आदि का विवरण
		0-0.6''	0.6''-2'	2'-4'	4'-8'	> 8'			
1	2	3	4	5	6	7	8	9	10
अक्टूबर-20									
नवम्बर-20									
दिसम्बर-20									
जनवरी-21									
फरवरी-21									
मार्च-21									
अप्रैल-21									
मई-21									
जून-21									
जुलाई-21									
अगस्त-21									
सितम्बर-21									

प्रधान मुख्य वन संरक्षक
अनुश्रवण एवं कार्य योजना
लखनऊ

- **Propagation of Eucalyptus – Method**
- **Ball Plants – Transportation**
- **Irrigation Channels**
- **Store House, Keeper House**
- **Stand & Plastic cups**
- **Division of Area within Nursery**

- **Layout, Altitude, Aspect, Site Selection, Site preparation**
- **Techniques for uprooting – Naked Plants**
- **Time & Height Factor to decide the planting age & goals**
- **Grafting Techniques**
- **Pest & Weed control**

- **Temp. & Humidity Control**
- **Season of planting & raising nursery**
- **Tissue Culture**