

## **IMPLEMENTATION OF RIGHT TO INFORMATION ACT, 2005 AT AFRI, JODHPUR**

### **Information provided under the Section 4(1) of the act.**

#### **1. Sec.4(b)(i): The particulars of its organization, functions and duties;**

##### **Background**

- Arid Forest Research Institute (AFRI), Jodhpur is one of the eight research institutes of the Indian Council of Forestry Research and Education (ICFRE), Dehradun which is an autonomous council under the Ministry of Environment & Forests, Govt. of India, New Delhi.
- AFRI was established in 1987 and started in a rented building in Shastri Nagar, Jodhpur. It was extended to 12<sup>th</sup> Sector of Chopasani Housing Board in December 1987 and subsequently in 16<sup>th</sup> Sector of Chopasani Housing Board, Jodhpur in 1988. The staffs of Euclayptus Research Centre, Vadodara, Gujarat, Forest Ranger College, Balaghat, Madhya Pradesh and Forest Ranger College Chandrapur, Maharashtra were transferred to this institute.
- Initial two years were spent for indentifying and acquiring land and deciding modalities of recruitment of research personnel. In 1990, with the acquisition of land and recruitment of research personnel, the research and infrastructure development activities gained momentum. Subsequently, sufficient progress was made after construction of institute's building and shifting of the institute in the present campus (20.82 ha) at New Pali Road in 1995 with a sister campus at Basni Plot No. 729 (9.92 ha) by developing facilities of laboratory and experimental fields, equipping library, strengthening the research apparatus in terms of personnel and pursuing the research project.
- The main campus is having Administrative Block & Laboratories, Library cum Information Centre along with an auditorium, a Guest House, Scientist Hostel-cum-Transit Accommodation and a Community Centre. The institute has six Experimental Fields & a Model Nursery (34.41ha) nearby to it. It has five Divisions namely Forest Ecology & Climate Change, Silviculture & Forest Management, Forest Protection, Genetics & Tree Improvement and Extension involved in various kinds of forestry research activities.

##### **Mandate and objectives of Institute**

- The Mandate of Institute is "Forestry research for conservation of biodiversity and enhancement of bio-productivity in Rajasthan, Gujarat and Dadra & Nagar Haveli with special emphasis on

arid and semi-arid regions”. This falls broadly under ICFRE mandate “To generate, preserve, disseminate and advance knowledge, technologies and solutions for addressing issues arising out of interaction between people, forests and environment on a sustained basis through research, education and extension”.

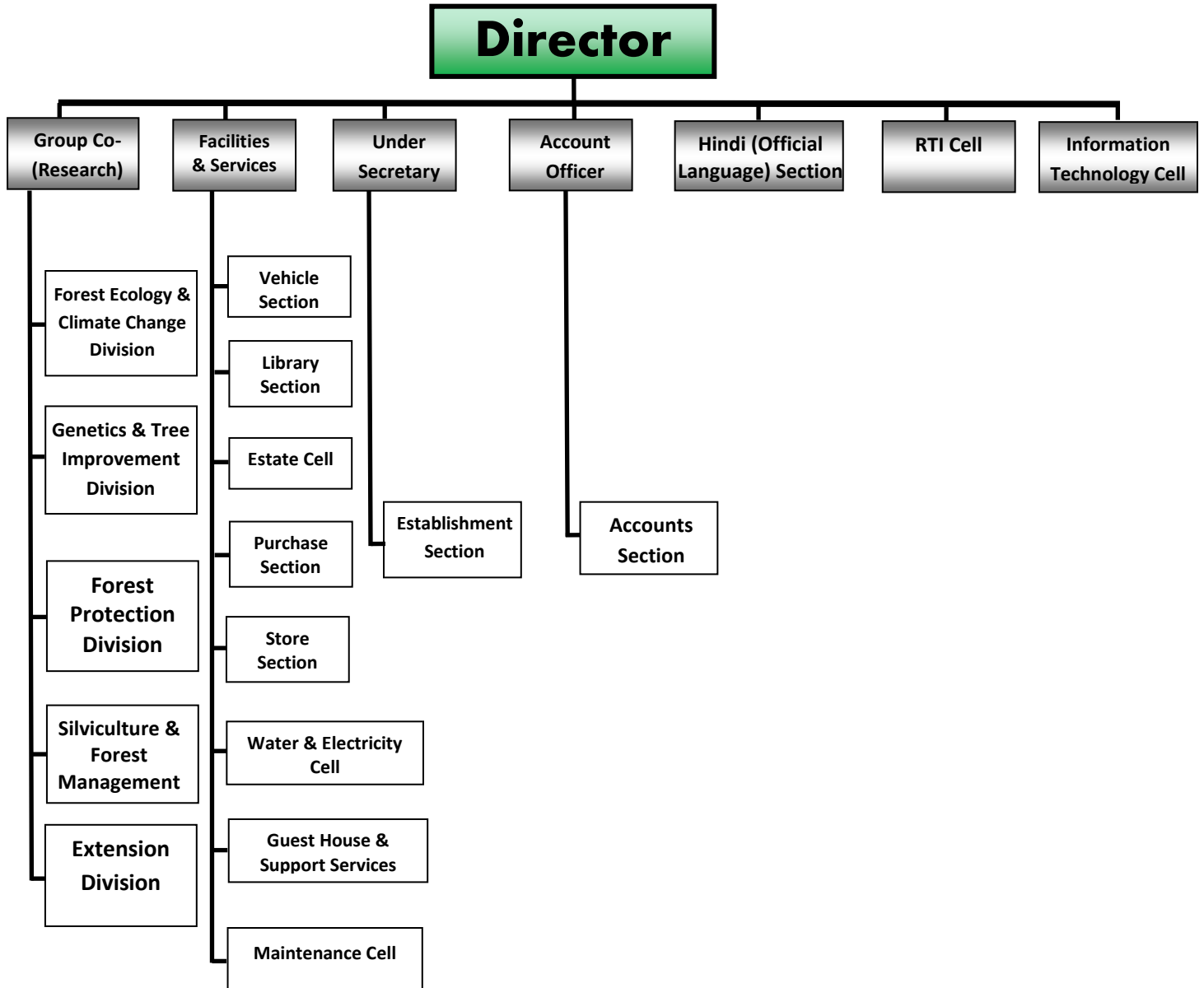
- The prime objective of the institute is to cater to the forestry research needs of Rajasthan, Gujarat and Dadra & Nagar Haveli.

### **Thrust Areas of Research**

- To develop techniques for rain water harvesting in arid areas.
- To develop technology for afforestation on stress sites.
- Eco-stabilization of deserts with emphasis on sand dune fixation.
- To develop techniques for production of high quality planting material.
- Provenance trial of important arid zone species.
- Studies on bio-fertilizers and biopesticides.
- Research on Non-Wood Forest Products of arid zone.
- Tree improvement through tissue culture & genetic engineering.

## Organization and Structure

- The organizational structure of the institute is provided below:



## **Research Divisions - Goals Objectives and Resources**

The institute has five Divisions namely Forest Ecology & Climate Change, Silviculture & Forest Management, Forest Protection, Genetics & Tree Improvement and Extension, involved in various kinds of forestry research activities. A brief of the divisions are as follows:

### **1. Forest Ecology & Climate Change**

Desertification and consequent land degradation is a common threat world over. The problem in this region is severe with extremes of weather condition, low and erratic rainfall (100-400 mm) and high evapo-transpiration. Soils are immature, structure-less, and very coarse in texture with low water holding capacity and poor nutrient status.

Scarcity of water and poor nutrient status is reflected in the form of poor vegetation cover and low productivity in the area. It is further aggravated by high population pressure. The average human and livestock population densities in Indian arid zone are 108 and 137 km<sup>-2</sup>, respectively. This leads to crop intensification and changes in land use pattern.

#### **Goal**

Sustainable management of natural resources

#### **Objectives**

- To monitor natural/plantation forests and soils for sustainable development
- To conserve and manage soil and water resources for sustained land productivity
- To evolve technology for desert afforestation and biodiversity conservation
- To develop package of practices for rehabilitation of wastelands and problem soils
- To generate data on various aspect of ecology i.e., carbon sequestration, climate change and forest invasive species
- To disseminate the finding of research to end users through talk, trainings, publication, workshop/ symposia etc

#### **Resources**

The division is equipped with well established laboratories and sophisticated instruments like Atomic Absorption Spectrophotometer, UV Visible Spectrophotometer, Orion Autochemistry System, CO<sub>2</sub> gas

analyser, Porometer, ICP-MS, CNS analyzer etc.. Besides this, 90 numbers of in-filled non- weighing type of lysimeters are also available for basic studies in the field of plant soil water relationship in Ecology Experimental Field Area.

## **2. Genetics and Tree Improvement**

GTI Division is actively engaged in research related to conservation of genetic resources and variability, screening of genetic variability through provenance trials, improvement of planting stock, mass multiplication through tissue culture and conventional methods of vegetative propagation of forest tree species of arid and semi arid regions. The division is also gearing up to initiate genetic engineering research on forest tree species of medicinal significance and over exploited species of economic importance. The division is well equipped with all the latest equipments required for carrying out research and also have a well established Tissue Culture Laboratory.

### **Goal**

Forestry research for conservation of biodiversity and enhancement of bioproductivity in Rajasthan and Gujarat and Dadar and Nagar Haveli with special emphasis on arid and semi-arid regions.

### **Objectives**

- To conserve and utilize genetic resources for increasing forest productivity
- To conserve genetic variability for future tree breeding works
- Screen geographical variations suitable to the planting sites
- To improve planting stock
- To develop alternate and fast mass multiplication protocols for species of the region using biotechnology interventions
- To utilize genetic variability through genetic engineering
- To use new high throughput tools to understand genetics at a molecular level

### **Resources**

The division has well established Tissue Culture Lab, Molecular Biology Lab, Reproductive biology lab, green house and mist chambers. Equipment like – Microscopes, Culture racks, Laminar air flow hoods, PCR Thermal cyclers, Centrifuges, Gel-doc systems, electrophoresis equipment, water purification unit, autoclaves, distillation units etc are available. Provenance trials, progeny trials, Vegetative Multiplication

Gardens, Seed Production areas of different tree species as well as tissue culture demonstration trials of some keystone species are also being maintained by the division.

### **3. Forest Protection Division**

The insect pests and diseases are amongst the most important one in the successful establishment of forest tree species in arid and semi arid zone of Rajasthan. Parasitoids, predators and pathogens are the major factors in natural biological control, acting as regulators of host insects. Successful reproduction by entomophagous insects is dependent on the location of suitable hosts or prey on which they used to oviposit or feed. The division is working to address these problems and is involved in developing the eco-friendly management strategies for the insect pests and diseases through integrated pest management (IPM). The division is engaged in carrying out research in evaluation, identification, bio-ecology and bio-management of insect pests of arid and semi arid tree species including nursery.

#### **Goal**

Integrated Pest and Disease Management (IPDM) for forestry species.

#### **Objectives**

- Management of insect pests and diseases in forest nurseries, plantations and natural forests.
- Screening, evaluation, identification and augmentation of insect pests and diseases of freshly felled as well as stored wood.
- Testing of phytopesticides against major insect pests.

#### **Resources**

Over the years the Division has developed well equipped laboratories and insectary. There present a considerable number of books on forest protection aspect in the central library of the Institute.

### **4. Silviculture & Forest Management**

#### **(i) Non Wood Forest Products**

In recent years, non-wood forest products (NWFPs) have attracted considerable global interest. This is due to the increasing recognition that NWFPs can provide important community needs for improved rural livelihood; contribute to household food security and nutrition; help to generate additional employment and income; offer opportunities for processing enterprises; contribute to foreign exchange earnings; and support biodiversity conservation and other environmental objectives. Uninterrupted fodder supply is

very important in the livestock based economy of arid zone, increasing population pressure necessitated technology development for utilization of wastelands- salt affected or degraded for augmenting the fodder production. NWFP division is involved in doing research on phyto-chemical evaluation of medicinal plants, developing technologies for salt land utilization, silvi-pastoral systems for optimal utilization of wastelands and enhanced gum production from arid zone flora.

## **Goal**

To do research on various aspects of non wood products of forests and plantations

## **Objectives**

- Revegetation of salt affected land through afforestation and improved management practices.
- Phyto-chemical evaluation of aromatic and medicinal plants for their sustainable utilization and value addition, conserving the biodiversity and improving income generation.
- Survey of essential oil yielding species, identification of high oil yielding plant species and estimation of oil content.
- To enhance fodder productivity through silvi-pastoral system
- To develop technologies for enhanced gum production from arid zone flora.
- Nutritional analysis of arid zone species with special emphasis on Leaf Protein Concentrates.

## **Resources**

The division has well established laboratories and sophisticated instruments like HPLC (Binary Gradient), UV-VIS spectrophotometer, Pulsewave NMR Analyzer, Near Infra Red Spectrophotometer, Milli-Q Water purification system, Mettler Balance, Digester & Protein Analyzer, Refractometer, Polarimeter, Microprocessor based pH and EC Meters, Gel Electrophoresis, Flame photometer, Muffle Furnace and Oven.

### **(ii) Silviculture**

The forest resource is very important resource for any society and it should be utilized to its best extent in order to provide the society better prospects of living. Moreover, the productivity of the forest may be optimized through appropriate growth & yield studies. The yield of the forests can be increased by adopting the better management practices.

The analysis of the complex interaction between the level of growing stock, timber harvest and tree growth, is the central theme of forest management. Effective management of forest resources requires a

pro-active attitude and an ability to cope with complexity. Pro-active in contrast to re-active management acknowledges the need for effective planning.

The unit of Forest Management is looking after works related to forest mensuration, Biometrics, market survey and various aspects of management of forests.

### **Goal**

To do research on silvicultural and management aspects of forest plantations in Rajasthan, Gujarat and Dadra & Nagar Haveli

### **Objectives**

- Preparation of volume/yield tables
- Modelling growth & yield in forest plantations for their sustainable management
- Studies on the effect of spacing, lopping etc. on tree growth
- Market survey regarding timber, bamboo and fuel wood
- To develop protocols for seed testing, storage, and pre-treatment of seeds.
- To get quality seeds of different tree species for increasing productivity.
- To develop silvicultural management practices for important plants having medicinal importance.
- To develop improved nursery techniques for important arid zone tree spp.

### **Resources**

The division is equipped with well established seed tech lab, model nursery, forestry arboretum and sophisticated instruments like Criterion-400, Power Chainsaw, Data Hypsometer Vertex-III, Mantex Digitech, Sunnto Clinometer, Pressler's Increment Borer, Seed Germinator and seed Grader.

### **5. Extension Division**

The economic benefit for a farmer can be substantially increased if some tree species of economic importance may be planted along with the crop which may produce economic benefit to the farmer after regular periods. Also the purpose of the research carried out at the Institute remains unfulfilled unless the research results are brought to the field. The research results need to be extended to the field by the extension activities.

The Agro Forestry & Extension division of the Institute is doing research on the agro forestry aspects in order to increase the benefit to the rural farmers. The division is involved in popularizing the tree planting, agroforestry models through people's participation. The division is also popularizing the results of the research carried out by the institute to the forest departments, farmers and other stakeholders. One important task of the division is establishment of VVKs and model villages in the States of Rajasthan, Gujarat & Dadra & Nagar Haveli for dissemination of forestry technology to end users and imparting trainings to the farmers and various field functionaries/SFDs and other extension activities.

### **Goal**

To do research in the Agro forestry and Extension and to disseminate AFRI's lab researches to the Farmer's fields/stakeholders in Rajasthan, Gujarat and Dadra & Nagar Haveli

### **Objectives**

- Publishing research results of the institute.
- Laying out demonstration trials for general public.
- Building Forestry Museums and creating models
- Extension of Forestry Research by organizing Farmers Trainings and through VVKs.
- Popularizing tree planting and agro forestry models through people participation.
- To enhance the productivity of farmers field and economic benefits for the stakeholders

### **6. Information Technology Cell**

The Information Technology Cell has been established in the Institute in order to facilitate different research divisions of the institute with the latest facilities in the field of Information Technology. The IT-Cell has been entrusted for providing the research divisions with the facilities of like - procurement and maintenance of different computing and associated equipments; operation and maintenance of the local area network at the Institute; providing all the research divisions of the Institute with the internet connectivity through the leased line; Operation and maintenance of the Website and implementation of IFRIS. The Information Technology cell is looking after the operation and the maintenance of the local area network at the institute. The local area network of the institute is comprised of 100 nodes with around 70 active users. The LAN at the Institute is distributed in three Office buildings with two fiber optic backbones & switches having advance technology. The IT Cell is presently equipped with two servers through which the High speed Internet connectivity is being provided to the users from the National Knowledge Network. The IT-Cell is providing all the IT- related facilities to all the divisions.

## **Goal**

To provide IT-facilities, Internet connectivity, e-mail services and web facilities, IT-Trainings to all the divisions of the institute and development/implementation of software for the Institute and to facilitate e-Governance.

## **Objectives**

- To create the required IT infrastructure for the Institute.
- To Procure and deploy the software on the computers.
- To provide the internet connectivity, email etc. to the institute users.
- To develop, host & update the website of the Institute.
- To Maintain the IT infrastructure and Internet Leased Line.
- To Implement e-Governance in the Institute.
- To provide documentation services to the Institute.
- To maintain the archival of the documents and the presentations.
- To provide the Video Conferencing facilities in the Institute.
- To provide the AE-BAS facilities in the Institute.

## **7. Hindi (Rajbhasha) Section:**

Hindi (Rajbhasha) Section of the Institute takes up the responsibility of the implementation of the Official Language Policy of Govt. of India and also entrusted with promoting the use of Hindi in the official day to day work as well as works of permanent nature. Officials posted in Rajbhasha section include an Asstt. Director (OL) and a junior Translator.

## **Objectives:-**

- To make the officials aware of the Official Language Policy of the Union Government and the provisions & orders of the official Language Act; to provide help for the compliance and make them comply.
- Translation work from English to Hindi and vice versa.
- Support for Hindi Translation to updating of AFRI website.
- To organize the meeting of the Official Language Implementation Committee to prepare agenda and minutes and to coordinate the actions taken on the decisions of the OLIC.
- To contact the Department of Official Language, MHA through Proper Channel.

- Vetting of scientific and Administrative material.
- To prepare supporting and reference literature.
- To organized Hindi Workshop.
- To make proposal for the purchase of Hindi books etc. in the library.
- To organize Hindi Day/Hindi week/Fortnight/Month.
- Work regarding inspection of the Parliamentary Committee on Official Language & actions to complete the assurances.
- To prepare and send the quarterly progress report regarding official language implementation to the ICFRE Headquarter and online to regional Implementation Office (RIO), New Delhi.
- Bilingual format of all forms and standard drafts used in the institute.
- Preparation of the quarterly progress report regarding official language implementation, review and follow up action.
- To provide support in organizing scientific seminars, conferences and workshops organized in Hindi.

#### **8. RTI Cell:**

RTI Cell is entrusted with providing information to applicant in the time bound manner prescribed under RTI Act. 2005. Officials posted in RTI Cell include a PIO alongwith a supporting staff. Director of the institute is Appellate Authority for RTI matters.

##### **Objectives:**

- To make sure to provide information at the earliest or within prescribed time limit.
- To provide information as per office record.
- To provide information online mode and offline as applicable.
- Provisions are complying with prescribed for BPL applicant.
- RTI applicant fee and additional charges for photocopy etc. is accepted in cash, postal order, bank D.D. etc. in favour of Director/Accounts officer, AFRI, Jodhpur except personal cheque. Information can be provided to applicant if RTI application is submitted on simple paper.
- RTI Cell dealt with efficiencies in the delivery of public services.
- PIO is obliged to answer each and every letter.
- RTI cell serve for effective implementation of the 'Right to Information' in the Institute.