

FOREST EDUCATION DIVISION

PAKISTAN FOREST INSTITUTE, PESHAWAR GOVERNMENT OF KHYBER PAKHTUNKHWA



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MESSAGE FROM SECRETARY CLIMATE CHANGE, FORESTRY, ENVIRONMENT AND WILDLIFE DEPARTMENT GOVERNMENT OF KHYBER PAKHTUNKHWA

The renewable natural resources of Khyber Pakhtunkhwa province of Pakistan are a unique bounty of Almighty Allah. In comparison with 5% national forest cover, about 26% area of the province is covered with forests. Our forest resources are extremely important for the nation due to their invaluable services, particularly sustaining water supply in the river systems of the country, protecting the upland watersheds against erosion and landslides, maintaining ecological balance, biodiversity conservation, wood and fodder production, climate change mitigation, and eco-tourism. The Government of Khyber Pakhtunkhwa is fully committed to promote forests and allied natural resources to combat climate change and other environmental disasters. The Billion Tree Afforestation Project was launched by the Government in 2014 and successfully completed in 2018. This was followed by 10 Billion trees Tsunami program throughout the country. The government is also giving high priority to research, education and training in forestry sector.



Pakistan Forest Institute (PFI) Peshawar is the pioneer and leading forestry research and education institute in the country. Accordingly the curriculum has been updated time to time to meet emerging challenges of Climate

Change, Biodiversity and promotion of Eco-tourism. PFI has produced thousands of graduates who have either served or currently serving the nation in the government, non-government sectors as well as international organizations. The Institute has been providing the best available facilities to its students. Its faculty is well qualified, experienced and devoted. With all these facilities, PFI offers conducive environment for enthusiastic students who are eager to learn the art and science of forestry and want to pursue a bright and rewarding profession. To meet the growing need of forestry research and education in the country efforts are under way to upgrade the institute to the status of a full fledged university.

I wish all the selected students success in their studies.

Shahid Zaman

Secretary Climate Change, Forestry, Environment and Wildlife Department, Government of Khyber Pakhtunkhwa

MESSAGE FROM DIRECTOR GENERAL

Welcome to the Pakistan Forest Institute (PFI), the premier institution for education, training, and research in forestry and allied disciplines. Since our nation's independence, PFI has been at the forefront of shaping future foresters and environmental stewards at both national and regional levels. Our proud legacy is evidenced by the numerous graduates and trainees who now hold key positions in provincial and regional forest departments, as well as esteemed organizations both within Pakistan and on the global stage, contributing significantly to sustainable forest management and conservation.

Forestry is an exceptionally rewarding yet challenging profession, demanding a robust academic foundation, practical skills, and unwavering ethical principles. At PFI, we strive to cultivate these qualities in our students through a rigorous and merit-based selection process, followed by imparting of extensive scientific knowledge, handson experiences in diverse forest ecosystems, fostering meaningful interactions with seasoned forest managers and executives, rigorous physical training, and instilling a strong emphasis on professional ethics and character development.

We wholeheartedly welcome aspiring foresters who share a passion for the environment and seek academic and professional advancement. Rest assured, PFI is dedicated to delivering the highest standards of education and training in forestry. Our goal is to produce graduates and trainees who not only possess competence and efficiency but also demonstrate exceptional managerial and leadership prowess. Furthermore, we instill a profound sense of public service, recognizing that our graduates will play a pivotal role in safeguarding and nurturing our precious forest ecosystems and preserving biodiversity for generations to come.

To those selected for our esteemed forestry programs at PFI, heartfelt congratulations! Embrace this exciting and challenging journey of professional training and development. As you step into this transformative experience, we encourage you to embrace innovation and forward-thinking in forestry practices. In an ever-changing world, the sustainable management of our forests demands creative solutions and cutting-edge technologies. You, as the future



generation of foresters, have the power to drive positive change, make scientific breakthroughs, and find sustainable ways to coexist with nature.

Together, with your enthusiasm, dedication, and vision, we will build a brighter future for our nation and the planet. Your commitment to preserving our forests and biodiversity will leave a lasting impact, benefiting current and future generations. Once again, welcome to PFI, where the journey of knowledge, exploration, and conservation begins. Let us join hands to ensure a greener, healthier, and more sustainable world.

Manzoor Ahmad Director General

MESSAGE FROM DIRECTOR

I feel honoured to convey my cordial message to the aspiring new entrants in the Forestry degree program. Forestry is the core component of our natural environment. Forestry profession is not only a service to nature but a service to the future generations, who have equal right to live in a green natural environment. Today, the grave issues of climate change, global warming, biodiversity loss and environmental degradation are threatening the life systems on this planet. It is a challenging profession to safeguard nature and humanity in face of these challenges.

Pakistan Forest Institute is a prestigious institute of international repute in forestry education, research and training. Our excellent faculty is committed to help students translate their interest in forestry, wildlife and environment into a rewarding career. In our degree program, imparting of academic knowledge is duly supported by practical exercises, physical training, discipline and character building. Forestry education and training at PFI require high level of commitment, dedication and hard work. It is a full time training where students practically learn to become trained forestry professionals.



Forestry education at PFI is a unique but a challenging opportunity. PFI has a well established network of professionals working in Forest and Wildlife Departments of all provinces and territories. PFI students get frequent opportunities of interaction with these departments during their field tours and are benefitted from the rich experience of the officers of the departments. Besides, PFI also maintains close collaboration with international organizations like IUCN, WWF, FAO, ICIMOD, INBAR, GIZ, etc. which provide opportunities of learning and career building for PFI graduates. The forestry graduates of PFI have enormous opportunities of pursuing careers in national and international organizations both in public and private sectors.

I wish and pray for happy and rewarding years of study and training to all new entrants at PFI, Peshawar.

Dr. Anwar Ali
Director
Forest Education Division



Pakistan Forest Institute: The Home of Foresters

INTRODUCTION

Pakistan Forest Institute (PFI), Peshawar was established as a national organization in 1947 to cater for the education, training and research needs of forestry sector in the country. PFI has, presently, a status of an Attached Department under the Climate Change, Forestry, Environment & Wildlife Department of Government of Khyber Pakhtunkhwa. The Institute conducts research and imparts education and trainign at BS level in forestry and allied sciences. The PFI students include nominated candidates of the Provincial Forest/Wildlife/Environment Departments including AJK and Gilgit-Baltistan and other government and Non-Governmental agencies engaged in forestry activities; students selected against general seats; and nominees from foreign countries. The Institute has been affiliated with University of Peshawar for the purpose of examinations and award of degrees.

PFI has a total area of 93.75 hac. located in the greater campus of university of Peshawar, housing cluster of universities, including University of Peshawar, University of Agriculture, Peshawar, University of Engineering and Technology, Khyber Medical College and Islamia College University. It is situated in the vicinity of historical Khyber Pass at a distance of about 14 and 10 km from Railway Station, Peshawar Cantonment and Peshawar International Air port, respectively.

The Institute has a brilliant record in the fields of forestry education and research. It has attained international standing in research and education and has been actively contributing to conservation, development and sustainable management of forest and allied

natural resources throughout Pakistan. PFI produced graduates of high caliber who have served on top positions in different national and international organizations both in the public and private sectors.

MISSION

The PFI's mission is the sustainable development of forests and allied natural resources through research, education and training.

OBJECTIVES

The main objective of PFI is to promote research, education and training in forestry and allied sciences. The specific objectives of forestry education at PFI include the following:

- 1. Train manpower for all Provincial/Regional Forest/wildlife Environment Departments and other organizations in scientific and integrated management of forestry, rangeland, wildlife and watershed resources.
- 2. Produce responsible and disciplined forestry graduates imbued with spirit and ambition to use their professional knowledge and ability to conserve, manage and develop natural resources.
- 3. Produce social foresters trained in communication and extension skills and dedicated to create public awareness and secure public participation in sustainable management of forests and allied natural resources.
- 4. Enhance managerial and leadership skills of the trainees and equip them with latest skills and knowledge to meet the emerging challenges including climate change, environmental

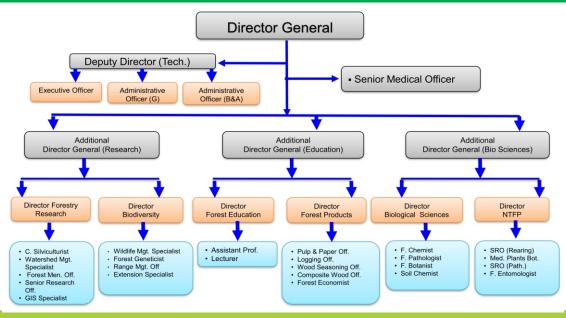
 Produce specialists in the fields of Forest Management, Biodiversity Conservation, Forest Engineering and Logging, Range Management, Watershed Management, Agroforestry, Environmental Forestry, GIS and Remote Sensing Technologies, Wildlife Management, Non-Wood Forest Products, Climate Change and Wood Sciences and Technology.

ADMINISTRATIVE STRUCTURE OF PFI

Pakistan Forest Institute is an Attached Department of Climate Change, Forestry, Environment & Wildlife Department,

Government of Khyber Pakhtunkhwa. It is headed by a Director General under whom are three Additional Director General and organized into six Divisions namely Forest Education Division, Forestry Research Division, Forest Products Research Division, Biological Sciences Research Division, Biodiversity Research Division and Non Timber Forest Product Division. Forest Education Division has the main responsibility to manage the academic courses while other Divisions focus on research activities in different specialties of forestry. Each Division is headed by a Director and conducts research in relevant fields through different branches. The organogram of PFI is as follows:

ORGANIZATIONAL SET - UP



FOREST EDUCATION DIVISION

Forest Education Division is the college section of Pakistan Forest Institute and is exclusively dedicated to forestry education and training. Beside short training courses in various fields of forestry, it conducts undergraduate course in forestry. The Division is headed by a Director and Faculty consisting of Assistant Professors and Lecturers. The Education Division is also supported by all other Directorates and Branches of PFI. The Research Scientists of PFI are also responsible for teaching subjects of their specialty. In addition to the existing education faculty and research scientists, eminent scholars, researchers and professionals are invited from public and private sectors to teach various subjects to forestry students and educate them about the emerging issues in forestry and allied natural resource management.



Group Photo of BS Forestry 2019-23

FORESTRY RESEARCH DIVISION

Forestry Research Division is responsible for conducting research and training on various aspects of forestry. It deals with problem oriented research in major disciplines of forestry namely, Silviculture, Forest Mensuration, Range Management, Watershed Management and Farm Forestry. The division maintains a nursery and Silviculture research garden over 50 acres at Peshawar where saplings are raised and research trials are conducted. Besides, the division is maintaining Field Stations in different ecological zones for field trials.

All the research officers of the Division teach their specialized courses and supervise research work of students in the field of their specialization. They also hold seminars and conduct short courses on Nursery and Planting techniques, GIS/RS, Forest Management, Carbon Accounting, etc. for various organizations. Forestry Research Division comprises the following branches:



Raising of straight-boled Nepali Shisham and Poplar nursery at PFI, Peshawar

SILVICULTURE BRANCH

Its research activities are field oriented and focused on development of nursery techniques, introduction of fast growing multipurpose tree species, development of technologies for afforestation of marginal and degraded lands, management of natural forests and forest plantations, agro-forestry etc.



Tube Plant Nursery Shed at PFI

WATERSHED MANAGEMENT BRANCH

The branch deals with management of watershed areas which are vital for regulating water flow in the river system for irrigation and hydro-power generation and thus are crucial for the economy of the country. The branch conducts applied research in conservation of soil and water, slope stabilization and development of appropriate engineering and bio engineering techniques for the protection of watershed

areas. In addition, this branch maintains two meteorological observatories and collection of met. data. The branch takes care of teaching the subject of Watershed management to forestry classes.

FOREST MENSURATION BRANCH

Principal research functions of this branch are determination of growth statistics of forests and plantations and preparation of volume and yield tables for important tree species of the country. These volume and yield tables are used for the estimation of wood volume of trees, and preparation of forest management plans. The branch is also dealing with carbon accounting and Carbon Stock estimation in forests.



Forestry students learning land stabilization techniques at Chitral

GIS/RS BRANCH

PFI has established a modern GIS/RS centre in the main campus to utilize modern techniques of Landuse changes, forest resource assessment and acquire latest information about land use changes and deforestation in forest planning and management. The centre is equipped with trained manpower, and state of the art equipments. The centre has produced several valuable geo-spatial documents for land use and forest cover assessment, biomass and carbon mapping and species distribution. It provides training and advisory services to all provincial forest departments and other stakeholders. Forestry Graduates are trained in GIS/RS techniques to enable them to effectively make use of the latest information technologies in resource planning and management.



Forestry students at GIS / RS Centre

FIELD STATIONS

The Institute has an extensive network of field stations in various ecological zones of the country. These include four permanent stations in Shinkiari, Bhurban, D.I.Khan, Kharian and temporary stations in Changa Manga, Chichawatni, Bhakkar, etc. Applied research is conducted in these field stations under local climatic and ecological conditions and thus various research problems are addressed. Forestry students' tours are conducted to these field stations to familiarise them with applied research. They have also the opportunities to practically conduct their Thesis and research work at these stations.



PFI Field Station. Shinkiari

FOREST PRODUCTS RESEARCH DIVISION

The history of Forest Products Research in Pakistan dates back to 1947 with the start of forestry education at Pakistan Forest Institute at Faisalabad. In 1969, this branch was upgraded to a division level with the provision of facilities for education and research in various disciplines of forest products. In 1980, Logging and Forest Engineering and Pulp and Paper branches were also added to the Division.

Main Functions of this division are: to plan, organize and supervise research and training in Forest Products; to advise Forest Departments, Government departments/ private organizations of wood concern and wood based industries on all matters relating to timber harvesting, wood type, quality, processing and utilization; training of in-service personnel of Government departments, armed forces, industries etc. to enhance their skills and improve their working through short courses in wood technology. The Division also provides support to the students from other universities/ colleges for thesis research work in various disciplines of Forest Products.

Forest Products Research Division is responsible for conducting teaching and research in the following disciplines:

FOREST ECONOMICS BRANCH

This branch collects and compiles forestry statistical data from all provinces and regions in the country. It maintains data base of forest area, records of forest production, forestation, production of nursery plants, revenue and expenditure of forest departments, imports of wood and wood products with other related information of forests. The branch officer is also responsible for teaching forest economics to students.

WOOD ANATOMY BRANCH

Main activities of this branch are: identification of local and imported timbers on the basis of wood structure; study of anatomical properties of local timbers and compilation of basic data helpful in different practices of wood testing and processing; study of fiber morphological characteristics of low value woods to determine their suitability for wood based products; conducting enquiries about testing of wood samples for their identification, received from various Govt; departments/ private organizations; teaching to BS Forestry classes in the relevant subject and providing guidance to the students for their theses/ term papers; training of representatives from Government/ private organizations of wood concern in the field of wood structure and identification.



Wood Anatomy Lab

WOOD TECHNOLOGY BRANCH

Main activities of this branch are: determining the physicomechanical properties of local and imported timbers and collection of technical data to determine their suitability for specific uses; suggesting local substitutes of foreign timbers based on the strength properties; teaching to BS Forestry



classes in the subjects of Timber Technology and Forest Utilization and providing facility to the Forestry students and also

Utilization and providing facility to the Forestry students and also from other Universities for thesis research work; conducting inquiries about testing of wood samples for their physical and mechanical properties received from various Government/ private organizations and training of employees from other Departments/ private agencies of wood concern for properties and uses of different wood species.

COMPOSITE WOOD PRODUCTS BRANCH

Main activities of the branch are: determining the suitability of

low quality woods/ waste materials for manufacturing of panel products; improving the properties of wood based panels manufactured from local wood species; teaching to Forestry classes in the field of composite wood products and providing guidance for their theses/term papers; conducting inquiries about testing of wood based panels for various properties



Wood Mechanics lab

received from Govt;/private organizations; training to representatives of other organizations for manufacturing, testing and evaluation of different types of panel products and providing advisory services to wood based panel industries.

PULP & PAPER BRANCH

Main activities of this branch are: determining the suitability of different woody and non-woody raw materials for pulp and paper manufacture; testing and evaluation of paper samples prepared on research basis for various strength properties; conducting inquiries about testing of pulp/ paper samples for various strength properties received from the industries; teaching the

relevant subject to Forestry classes and supervising thesis research work of the students; making bio-degradable paper cups for nursery raising on trial basis and evaluating their performance.

WOOD SEASONING BRANCH

Activities of this section are: studying the seasoning behavior of different local timbers; developing techniques for the wood quality improvement and minimizing the development of drying defects through proper seasoning; determining the economic and efficient methods of wood seasoning for different species; disseminating the solar kiln wood drying technology; teaching to Forestry classes in the field of wood seasoning and providing guidance to the students for their thesis research work/ term papers and training of in-service personnel from other wood concerned Departments/private industries for proper seasoning of different wood species.



Wood Seasoning Shed at PFI

BIOLOGICAL SCIENCES RESEARCH DIVISION

The Biological Sciences Research Division consists of Forest Botany, Forest Chemistry, Soil Chemistry and Forest Pathology branches. All the research officers of the Division are actively engaged in research and teaching to forestry students in their specialized fields and also hold seminars and short courses in their respective fields for different stakeholders. A brief account of different branches is as under:

FOREST BOTANY BRANCH

This branch was established in January 1949. Since its inception, the branch is actively engaged in the promotion of research and education in the field of Forest Botany, Plant Taxonomy and allied subjects. The branch has established a Botanical Garden of rare and endangered plant species as a gene bank to restore plant diversity for future prosperity with 180 tree species and 20 shrubs and eight climber species that act as living plant Museum and Ecological Laboratory. Besides, a Phanerogmic Herbarium has been established and being maintained as plant library that helps in identification of plants and record of flora of Pakistan. It consists of 872 genera, 2098 species and 23000 specimens.

FOREST CHEMISTRY BRANCH

This branch deals with chemical analysis of plants. It conducts chemical screening of aromatic and medicinal plants, and evaluation of nutritive value of forages, forbs and grasses and wood chemistry. The branch also provides advisory services to the concerned industries and imparts training and education to the forestry students at BS level.

FOREST PATHOLOGY BRANCH

This branch deals with the pathological problems (forest diseases) of forest trees and their control measures. It also conducts study of forest mycoflora and its impact on the yield as well as quality of timber. Besides this, teaching to forestry students is also a main responsibility of the branch.

NON TIMBER FOREST PRODUCE (NTFP) RESEARCH DIVISION

Sericulture Research Division was established at PFI, in 1984 which was upgraded to Non Timber Forest



Mulberry variety "PFI-I"

Product Research Division in 2016. The primary objectives of the Division are: (i) Conduct research in fields of silkworm rearing, (ii) Silkworm Pathology, (iii) Forest Entomology, (iv) Moriculture, (v) Medicinal Plants, Apart from research, the Division is maintaining germplasm of silkworm and mulberry, maintaining Insect Museum having more than 22,000 insect specimens, transferring technology, and providing silkworm and mulberry propagating materials to different stakeholders. This Division also provides technical advice on Forest Protection to different stakeholders.

SERICULTURE BRANCH

This Branch is dedicated for the promotion and development of sericulture in Pakistan. It focuses on research, development, and extension in silkworm rearing, mulberry cultivation, and silk production. The branch plays a pivotal role in conserving and utilizing sericulture resources to uplift rural livelihoods and support cottage industries.

Key activities include applied research on silkworm breeds, development of disease management techniques, and training programs for farmers and stakeholders. The branch also collaborates with national and international organizations to enhance silk production technologies. It supports the socio-economic uplift of forest-dependent communities and contributes to sustainable NTFP management. Through education, capacity building, and innovation, the Sericulture Branch remains committed to aligning with PFI's broader mandate of sustainable forest resource development.



Silk Worm Rearing at PFI, Peshawar

MEDICINAL PLANTS BRANCH

This branch was established in 1950 with the objectives to conduct quantitative and qualitative surveys of medicinal plants. It also conducts cultivation trials of medicinal plants for finding out agronomical data for the improvements of the crops, to

assess the demand and supply of herbal drug plants. It also maintains herbarium and museum containing drug specimens found in Pakistan and to disseminate the knowledge and availability of medicinal plants to the interested public and pharmaceutical industries and teaching to forestry students.



Medicinal Plants Research Trials at PFI, Field Station at Bhurban

FOREST ENTOMOLOGY BRANCH

Forest Entomology Branch was established during 1947 with the creation of the Pakistan Forest Institute. Since its inception the main functions of the branch are conducting research on obnoxious forest insects and other pests and teaching the subjects of forest zoology and entomology. The research findings have been published in the form of research articles, technical reports, popular publication and news items for the use of researchers, foresters and common man. Among the completed project the Blue pine defoliator, Chir pine defoliator, Shisham bark borer and Walnut borer which were great havocs in very important areas like Islamabad, Murree, Kashmir, Hazara, and Swat. The havocs were averted in very marvelous ways by adopting the mechanic-biological means of control without polluting the environment with poisonous insecticides. This branch has played an active role in imparting practical training as well as covering the prescribed syllabi of the subjects of forest zoology and entomology to BS forestry students.

BIODIVERSITY RESEARCH DIVISION

Biodiversity Research Division has been established at PFI in 2016. It comprises Wildlife Management, Range Management, Forest Genetics and Extension Branches.

WILDLIFE MANAGEMENT BRANCH

Wildlife being an integral part of forest ecosystem requires due attention. This branch conducts research on various wildlife species to determine their population dynamics and their habitat, factors affecting their population growth and suggest measures to protect and conserve the wildlife. Teaching Wildlife Management to forestry students is also a mandate of this branch.

FOREST GENETICS BRANCH

It deals with the tree improvement research programme, including provenance and progenies trials, selection of species for various ecological zones, introduction of exotic tree species, selection of plus trees and establishment of seed stands for better quality seed collection and testing of seed quality. It also takes care of teaching Genetics to forestry classes.



Paulownia Clonal Trial at PFI

RANGE MANAGEMENT BRANCH

This branch conducts research for improving rangelands of the country through development of scientific range management techniques, like introduction of high yielding and nutritive forage species, appropriate grazing management techniques, evaluation of grazing capacity and potential of rangelands. The branch is also responsible for teaching the courses of range management to BS Forestry classes.

EXTENSION BRANCH

The Extension Branch is responsible for the online timely publication of the institute's research findings, including the Pakistan Journal of Forestry, annual progress reports, and coverage of institutional news and events. It also manages Central Forest Library and Forest Museum. The Central Forest Library serves as a key source for technical information in forestry and allied disciplines, supporting researchers, students, and faculty of PFI and other institutions. Through the Higher Education Commission's Digital Library, users have access to approximately 75,000 online resources. The PFI Museum showcases a unique collection of major and minor forest products and their valueadded by-products. It attracts regular visitors from various institutions, promoting awareness in areas such as forestry, wildlife, watershed, range management, biodiversity, climate change, and environmental conservation.



Central Forest Library and Forest Museum at PFI, Peshawar

ADMISSION TO BS FORESTRY PROGRAM 2025

The Institute offers professional long and short courses in Forestry and allied sciences. A candidate with F.Sc. Pre-medical or Pre-Engineering or equivalent is eligible for admission to 4-years BS Forestry course. Admission is open to male and female candidates in the following categories:

i Stipendiary Candidates of Provincial Forest / Wildlife / Environment Departments

First priority for admission is given to stipendiary candidates of provincial and regional Forest / Environment / Wildlife departments including Azad Jammu & Kashmir (AJK) and Gilgit-Baltistan (GB) and or other Government Organizations who are selected through their respective Public Service Commissions.

ii. In-service Nominees of Provincial and Regional Forest / Environment / Wildlife Departments / Public Sector Organizations / projects including AJK and GB.

The admission criteria for in-service nominees of public sector departments/organizations/projects is as under:

- The nominee should be a regular employee of the nominating department / organization or a selectee of the public sector project and the nomination should be approved by the head of the department i.e. Secretary to the Government.
- 2. The training expenses of the nominee should be borne by the nominating department / organization/project.
- 3. The nominee should possess the minimum academic qualification as required for admission to BS Forestry on self-finance basis.

iii. Self-finance Seats

Subject to availability of seats, applications are invited through print and electronic media for admission in BS Forestry against self financed seats.

All seats under the self-finance category shall be filled purely on merit. The candidates selected under this category will have to bear their expenditure by themselves.

CRITERIA AND PROCEDURE FOR ADMISSION TO BS (FORESTRY) PROGRAM

| S.No | S.No Qualification/criterion Eligibility | | | |
|-------|--|--|--|--|
| 3.110 | Qualification/criterion | Eligibility | | |
| 1. | SSC (Science) or equivalent | Minimum 2 nd division | | |
| 2. | F.Sc (Pre-medical / Pre-engineering) or equivalent | Minimum 2 nd division | | |
| 3. | Entry test (to be conducted by independent testing agency/NTS) | Minimum 50 Marks | | |
| 4. | Interview | Minimum 50% | | |
| 5. | Physical fitness test and medical fitness certificate | Successful completion of 1.6 kms run within 10 minutes and production of medical fitness certificate from Senior Medical Officer, PFI. | | |
| 6. | Age on closing date of admission | Maximum 22 years | | |

At first stage National Testing Service (NTS) will conduct the screening test, for which date and venue(s) of test will be announced by NTS through its website (www.nts.org.pk). The candidates have to apply separately on NTS form as per NTS requirements.

At second stage the interested candidates qualifying the entry test will apply on prescribed Admission Form at PFI separately. Prospectus and Admission Form can be downloaded from PFI website www.pfi.gov.pk and/or www.pfi.gov.pk

Hard copy of Admission Form complete in all respects along with attested copies of relevant documents, as mentioned in prospectus and Admission Form, and original Deposit Slip of Rs.1000/- (non-refundable) in Account No. **PK51NBPA 0388003048615648**, National Bank of Pakistan (NBP), University of Peshawar Campus Branch (branch code: 0388), Peshawar must reach on or before closing date to the office of Director, Forest Education Division, Pakistan Forest Institute (PFI), Peshawar.

ENTRY TEST SYLLABUS AND ALLOCATION OF MARKS FOR ADMISSION IN BS FORESTRY

| S. No | Subject | Marks | Level |
|-------|---|-------|-------|
| 01 | Mathematics | 25 | |
| 02 | Biology | 25 | |
| 03 | English (Grammer, Vocabulary & Comprehensive) | 25 | F.Sc |
| 04 | General Knowledge | 25 | |
| | Total | 100 | |

The merit list of qualified candidates will be prepared on the basis of performance in academic examinations, entry test and interview. Weights assigned to performance in academic examinations, entry test, and interview will be 50%, 40% and 10% respectively. Separate merit lists will be prepared for each category of self-finance seats under the program. Further distribution of weights assigned to academic examinations will be Matric (50%), F.Sc (50%) for BS forestry admission.

ALLOCATION OF SELF FINANCE SEATS UNDER EACH CATEGORY

General Self-Finance Seats for BS Forestry

| Sr. No | Category | Seats | |
|--------|---|---|--|
| 1 | Merit | 7.5 % of the seats from all Pakistan | |
| 2 | Female | 10 % of the seats | |
| 3 | Khyber Pakhtunkhwa | 50 % of the remaining seats | |
| 4 | Other provinces/ regions including AJK & GB | All of the remaining seats with distribution as per provincial/ regional quotas in the federal jobs, with minimum of one seat for each province/ region subject to availability of seats. | |

Note: Interested candidates may apply on Application Form for Admission on Self-Finance Basis (General Seats)

Reserved Quotas Self-Finance Seats for BS Forestry

| Sr. No | Category | Seats |
|--------|--|-------|
| 01 | Children of in-service employees of PFI | 01 |
| 02 | Children of in-service employees of Khyber Pakhtunkhwa Forest Department/ Wildlife Department/ Climate Change, Forestry, Environment and Wildlife Department (Secretariat), Peshawar | 01 |
| 03 | Children of in-service employees of all residential educational institutions in Peshawar University Campus on reciprocal basis | 01 |
| 04 | Religious minorities | 01 |
| 05 | Ex-FATA | 02 |

Note: Interested candidates may apply on Application Form for Admission on Self-Finance Basis (Reserved Seats)

FEMALE SEATS

As per government policy females are encouraged to apply in forestry degree programs, 10% of the General self-finance seats have been reserved for them.

ACADEMIC CALENDER

The BS Forestry course is spread over Eight Semesters with the following standard schedule:

ACADEMIC CALENDER FOR BS FORESTRY

| Academic Year | Semester | Calendar | |
|----------------------|---------------|--|--|
| 1 st Year | I Semester | 3 rd week of October to 2 nd week of April | |
| 1 st Year | II Semester | 3 rd week of April to 2 nd week of October | |
| 2 nd Year | III Semester | 3 rd week of October to 2 nd week of April | |
| 2 fear | IV Semester | 3 rd week of April to 2 nd week of October | |
| 3 rd Year | V Semester | 3 rd week of October to 2 nd week of April | |
| 5 feat | VI Semester | 3 rd week of April to 2 nd week of October | |
| 4 th Year | VII Semester | 3 rd week of October to 2 nd week of April | |
| 4 Year | VIII Semester | 3 rd week of April to 2 nd week of October | |

Note: Due to administrative/unforeseen reasons at UoP, the commencement and closing dates of the semesters may vary from the schedule.

ADMISSION TO 5th SEMESTER OF BS FORESTRY

The candidates having B.Sc. Forestry (2 years) from PFI, Peshawar with at least 45 % marks will be eligible for admission in the 5th Semester of BS Forestry (4 Years).

Once admitted, these students will be enrolled in a Bridging Semester before enrollment in the 5th Semester. The following courses, which are included in the

approved Scheme of Studies of BS Forestry (4 Years), will be offered to the students as "Non-Credit Course" in the Bridging Semester and will be "mandatory" to pass but shall not be counted in calculating GPA/ CGPA:

- i. Introduction to Environment
- ii. Biodiversity and Climate Change
- iii. Participatory Forestry
- iv. Introduction to GIS and Remote Sensing
- v. Integrated Land Use Management System

The seats in 5th Semester of B.S. Forestry degree program shall be filled on merit (all Pakistan) based upon %age of marks obtained in BSc Forestry (2 years). Where two or more candidates having the same percentage, the merit will be assigned in order of age. There is no age limit for admission in this program.

Candidates interested for admission to 5th Semester of BS Forestry are also required to pass physical test i.e. qualify 1.6 km run in 10 minutes and production of a medical fitness certificate from Senior Medical Officer of PFI, Peshawar.

Note: Interested candidates may apply on **Application Form for Admission** on **Self-Finance Basis BS Forestry (5th Semester)**

EXAMINATIONS SYSTEM

PFI is affiliated with the University of Peshawar for the conduct of examinations and award of degrees. Students have to abide by the rules of University of Peshawar regarding examinations. The University conducts external examinations at the end of each semester while PFI conducts Internal Assessment of the students. English is the medium of instruction and examinations for all the courses at PFI. A student failing in a semester examination is required to appear in the next scheduled examination as per University of Peshawar's rules.

ACADEMIC COURSES-BS FORESTRY

First Semester:

Biology, Mathematics, Introduction to Forestry, English-I (Functional English), Pakistan Studies, Islamic Studies / Ethics (for non Muslims, Orientation Tour

Second Semester:

Elementary Statistics, English-II (Communication Skills), Introduction to Environment, Geology and Soil Science, Introduction to Information and Communication Technologies, Principles of Economics

Third Semester:

Public Policy and Administration, Entrepreneurship, Forest Ecology, Perspective of Education, Ideology and Constitution of Pakistan, Forest Taxonomy, Land Revenue and Tenure System Fourth Semester:

Forest Survey and Levelling, Biodiversity and Climate Change, Participatory Forestry, Introduction to GIS Remote Sensing, Integrated Land Use Management Systems, Logical and Critical Thinking

Fifth Semester:

Forest Entomology, Forest Pathology, Wood Science and Technology, Forest Engineering (Buildings & Roads), General Silviculture, Ecotourism and Park Management, Study Tour (Forest Types)

Sixth Semester:

Forest Management, Watershed Management, Range Management, Wildlife Management, Forest Biometrics, Non-Wood Forest Products, Study Tour (Forest Management)

Seventh Semester:

Forest Genetics, Forest Resource Economics and:

Minor/Specialized Courses:

At the start of 7th Semester students will have to select as specialization any one of following disciplines:

- Forest Management (Forest Inventory & Analysis, Conservation Forest Management, Production Forest Management
- Watershed Management (Soil Conservation Techniques, Forest Meteorology, Forest and Range Hydrology, Application of GIS & RS in Watershed Management)
- 3. Wildlife Management (Wildlife Biology and Ecology, Wildlife Management and Research, Wildlife Policies, Laws and Administration, Principles of Wildlife Management)
- Environmental Forestry (Environment and Forestry, Environmental Pollution and Mitigation, Environmental Impact Assessment, Environmental Policies and Laws)
- 5. Forestry and Climate Change (Climate Change: Science & Policy, Forest Carbon Accounting, Climate Change Vulnerability and Adaptation, Application of GIS & RS for Climate Change Studies and Biomass Assessment)
- Range Management (Range Vegetation Analysis, Livestock Nutrition and Grazing Management, Drought Management in Rangelands)

- GIS and Remote Sensing Techniques (Geo Informatics, Land Use Planning, Forest / Range Assessment and Monitoring, Integration of Global Navigation Satellite System (GNSS) and Google Earth Pro with Geographic Information System)
- 8. Participatory Forest Management (Community Based Forestry, Participatory Forest Management Planning, Participatory Forest Assessment)
- **9. Agro Forestry** (Agro Forestry Systems, Farm Forestry Management, Marketing of Agro Forestry Products)
- 10. Wood Science and Technology (Wood Harvesting Techniques, Wood Structure and Identification, Wood Testing and Processing, Wood Based Products, Dendrochronology and Its Application in Forestry)
- Non Wood Forest Products (Production Technology of Medicinal Plants/ Pharmacognocy, Sericulture and Apiculture Techniques, Minor Forest Products, Economics of Non Wood Forest Products)

Eighth Semester:

Forest Management Plan I, Capstone Project, Forest Policy and Law, Forest Accounts and Procedure, Research Methods and Scientific Writing, Field Experience/Internship.

STUDY TOURS

The unique feature of forestry education at PFI is that it is practical

and field-oriented. The students are equipped with requisite skills in addition to theoretical knowledge of forestry and related natural resources. For this purpose, the students are conducted a number of study tours of all forest types and ecosystems in the country to learn practical aspects of resource management. During study tours, senior field officers of Provincial / Regional Forest and Wildlife Departments accompany the students who demonstrate about various practical aspects of forest and biodiversity management. PFI students also undertake field exercises for Surveying and Road Alignment, collection of data for writing Forest Management Plan, etc. In addition, the forestry students have opportunities to visit field stations established by PFI in different ecological zones of the country and thus familiarize themselves with research issues of forestry.

FOREST MANAGEMENT PLAN / CAPSTONE PROJECT

Forest Management Plan also known as Working Plan is a standard document for continuity of Forest Policy, and prescribing/Controlling basic operations in a forest estate over a period of years. The students are given training in the field to conduct and write a Forest Management Plan in the final semester of their studies. During this exercise, the students are required to stay in the forest at-least for a month, collect and process the data for preparing a draft Management Plan. The final version of the Management Plan is to be presented by each student for evaluation in the final semester examination.



Students are being briefed about management of timber depot at Chitral

PHYSICAL FACILITIES

The Institute is amply equipped with class rooms, library, museum, GIS, Computer and analytical laboratories, nurseries, forestry research gardens, furnished hostels, play grounds and field stations in different ecological zones. A dispensary with qualified Medical Officers, Post Office, Utility Store and Mosque is available to cater for needs of the students and faculty.

BOARDING AND LODGING

As per requirements, the degree course is designed for residential students only. The admitted students/trainees are not allowed to reside outside the designated hostels.



BS Forestry Hostel-II

PHYSICAL FITNESS

Physical fitness is an essential part of forestry education to keep them fit and prepared for field duties in rough and tough conditions to which foresters are exposed. For this purpose, compulsory daily physical training in the morning and outdoor sports in the evening are integral part of the forestry training and education at PFI. Besides, a 10 km annual marathon race and field tours are conducted through regular time table to achieve high degree of physical fitness.



TUITION FEE AND TRAINING EXPENSES

Tuition fee, training and other expenses for the forestry courses are to be paid in advance by the Department/ Sponsoring Organization or the candidate himself/ herself, as per detail given below:

| Sr. | | Amount (Rs.) | |
|-----|---|--------------|------------------------------|
| No | Particulars/ Category | BS Forestry | Admission to 5 th |
| INO | | (4 Years) | Semester (2 Years) |
| 1 | Tuition Fee | 60,000 | 30,000 |
| 2 | Examination Fee | 130,000 | 70,000 |
| 3 | Study Tours (Hotel Charges, Maintenance/ POL of Vehicles, TA/DA of Staff, etc.) | 360,000 | 180,000 |
| 4 | Uniform Items | 200,000 | 100,000 |
| 5 | Sports Facilities (Indoors and Outdoors) | 60,000 | 30,000 |
| 6 | Maintenance of College Grounds/ Premises, etc. | 50,000 | 25,000 |
| 7 | Hiring of Visiting Teachers/ Teaching Aids | 60,000 | 30,000 |
| 8 | Hostel Services (Laundry, Barber, Supporting Staff, etc.) | 70,000 | 35,000 |
| 9 | Food Charges (@ Rs. 8,250/ month for 1 st year, Rs. 8,500/ month for 2 nd year, Rs. 9,000/ month for 3 rd year and Rs. 9,500/ month for 4 th year.) | 423,000 | 201,000 |
| 10 | Electricity (including Generator) and Natural Gas Charges | 190,000 | 95,000 |
| 11 | Books and Reading Materials | 5,000 | 5,000 |
| 12 | Security (Refundable) | 5,000 | 5,000 |
| 13 | Convocation Fee | 8,000 | 8,000 |
| 14 | Miscellaneous | 76,000 | 38,000 |
| | Total Rs. | 1,697,000 | 852,00 0 |

Note: In case of over expenditure on training and connected activities during study, the same will have to be paid by the trainee/ nominee/ student. Tuition fee and training expenses are subject to revision at any time as deemed fit in the public interest. Tuition fee for entire period, once deposited, is not refundable. In case, if duration of studies is extended due to unforeseen circumstances, the extra/ additional expenses will have to be borne by the trainee/ student. PFI reserves the right to re-appropriate expenditures amongst above mentioned heads/ categories. In case of premature exit of the trainee/ student, proportional share of the non-utilized dues (excluding non-refundable) will be refunded after deduction of 20% of balance amount. Training expenses will be deposited at the time of admission. In case of needy students, training expenses may be collected in inefallments subject to approval by the Director, Forest Education Division.

STUDENTS CONDUCT AND DISCIPLINE RULES

All the students are required to abide by the "Students' Conduct & Discipline Rules". These rules are aimed at character and personality grooming and creating a sense of responsibility in the students to serve the public and the country to the best of their ability. Note: Every student will get a copy of it in the orientation session.

GENERAL TERMS AND CONDITIONS

- 1. Incomplete/ incorrect Application Form or Application Form without relevant documents and original deposit slip and forms received after due date will not be entertained.
- 2. Only successful candidates fulfilling admission criteria, as mentioned in the prospectus, will be called for interview and physical test at PFI, Peshawar.
- 3. Interested candidates waiting for F.Sc. result may apply on Provisional basis and they have to submit attested copy of their DMC/ Certificate immediately, as and when result is declared.
- 4. The Institute reserves the right to withdraw any programme and to amend the policy governing programmes or to make inevitable modifications in the programmes or course of studies as and when deemed necessary.
- 5. Merit list(s) will be displayed on PFI website as and when finalized.
- 6. Interested candidates are advised to keep visiting PFI website (www.pfi.gov.pk and/ or www.pfi.edu.pk) regularly for updates. Anyother relevant information/ announcement will also be made through website of the Institute.
- 7. All selected candidates must produce verified copies of degrees/ certificates/ transcripts from relevant BISE/ university along with original migration certificate from BISE/ college/ university last attended and Medical Fitness Certificate issued by the Senior Medical Officer of PFI at the time of joining PFI, Peshawar.
- 8. An Undertaking to the effect for abiding by relevant rules and regulations of PFI and University of Peshawar (specimen available in office) on stamp paper of Rs. 100 shall be submitted by the student and his/her father/guardian at the time of joining PFI.

At any stage, if any of the documents submitted by the student at the time of admission/joining, is found fabricated/ fake/ tempered with, or the student found to have been expelled from any institute/ organization, the admission of the student shall stand cancelled.

DOCUMENTS REQUIRED:

A. At the time of applying for admission:

Applicant must attach the following documents, in the following order, with Admission Form:

- i. One recent passport size colour photograph to be pasted at Admission Form.
- ii. Attested photocopy of CNIC/ Form B of the applicant.
- iii. Attested photocopy of CNIC of father/ guardian.
- iv. Attested photocopy of Domicile Certificate of the applicant.
- v. Attested photocopies of SSC/ Matric/ O level, etc. DMC/ Result Cards and Board Certificate/ Equivalence Certificate.
- vi. Attested photocopies of HSSC/Intermediate/ALevel, etc. DMC/Result Cards and Board Certificate/Equivalence Certificates.
- vii. Attested photocopies of BSc Forestry from PFI DMCs and Degree (for applicant of 5th Semester only).
- viii. Service Certificate of Father or Mother of candidate applying against reserved seat of in service employees.
- ix. Character Certificate from the head of institution most recently attended by the applicant.
- x. Result card of Screening Test conducted by NTS.
- xi. Religious Minority Proof.
- xii. Original Deposit Slip of Rs.1000/- deposited in Account No. **PK51NBPA 0388003048615648**, National Bank of Pakistan (NBP), University of Peshawar Campus Branch (branch code: 0388), Peshawar.

B. At the time of Interview:

Applicant must produce above mentioned original documents at the time of physical fitness test/ interview.

C. At the Time of Joining PFI

- i. Undertaking, as per specification, on Stamp Paper of Rs. 100/- by the student and his/ her father/ guardian.
- ii. Migration Certificate, in original, from institute/ college/ university last attended.
- iii. Medical Fitness Certificate duly issued by Senior Medical Officer of PFI, Peshawar.
- iv. Verified copies of degrees/ certificates/ transcripts from relevant BISE/ university.

FACULTY



I. Mr. Manzoor Ahmad
Director General



Dr. Anwar Ali
 Director, Forestry Research / Education Division
 M.Sc Forestry, MS Climate Change (Australia)
 Ph.D (Climate Change)



Dr. Naveed Ahmed
Director, NTFP
M.Sc (Hons.) Agriculture
Ph.D (Entomology)

Mr. Ashar Faroog



Director, Biodiversity Research Division
M.Sc Forestry
M.Phil (Forestry & Wildlife Management)



Dr. Zahid Rauf
 Director, Forest Products Research Division
 BS Chemistry
 M.Phil (Inorganic Chemistry)
 Ph.D (Environmental Geosciences)



6. Dr. Sanam Zarif Satti
Director, Biological Sciences Research Division
M.Sc & M.Phil Bio-Chemistry
Ph.D (Environmental Geosciences)



Mr. Muhammad Atif Majeed
 Deputy Director Technical
 M.Sc Forestry



Dr. Ahmad Zamir
 Assistant Professor of Forestry
 M.Sc Forestry, M.Phil (Environmental Geosciences)
 Ph.D (Plant Biodiversity and Conservation)







10. Dr. Sajjad Saeed Assistant Professor of Forestry Ph.D Forest Management (China) Post Doctorate (Carbon Accounting)



11. Dr. Nowsherwan ZarifCentral Silviculturist
Ph.D (Silviculture) (China)



12. Mr. Aamir Shakeel GIS Specialist M.Sc Geography, PGD (GIS), M.Phil Geospatial Science



13. Dr. Tanvir HussainLogging OfficerM.Sc Botany, M.Phil (Molecular Biology)Ph.D (Biotechnology)



14. Mr. Muhammad Bilal Zia Forest Geneticist M.Sc (Hons) PBG Ph.D (in Progress)



15. Mr. Muhammad ShakeelForest EconomistM. Sc. ForestryM. A. Economics



16. Dr. Qudsia Khanam Senior Medical Officer MBBS



17. Ms. Manahil Wahab Wildlife Management Specialist M.Sc Forestry, M.Phil (Wildlife Mgt.) Ph.D (in Progress)



18. Mr. Zahid MahmoodExtension SpecialistM.Sc Forestry,M.phil (Forestry & Wildlife Management)



19. Mr. Khalid Hussain
 Assistant Wood Technology Officer
 M.Sc Botany
 M.Phil (Environmental Sciences)



20. Mr. Bilal Ahmad Assistant Forest Engineer M.Sc Forestry



21. Syed Tehseen Akhtar Hussain Gillani LibrarianM.Sc (Library and Information Sciences)



22. Mr. Raza Ullah Lecturer in Forestry M.Sc Forestry



23. Mr. Basheer Ahmad
Research Officer (Farm Forestry)
BS Forestry
M.Phil (Forestry and Wildlife Management)
Ph.D (in Progress)



24. Mr. Saifullah Khan
Research Officer (Farm Forestry)
M.Sc Forestry
M.Phil (Forestry and Wildlife Management)



25. Mr. Salman Ahmad
Research Officer (Farm Forestry)
BS (Forestry)
M.Phil (in Progress)



26. Mr. Muhammad IlyasResearch Officer (Soil)M.Sc (Hons) Soil and Environmental Sciences



27. Mr. Barkat Ullah Khan Wildlife Ecologist M.Phil Wildlife Ecology Ph.D (in Progress)



28. Mr. Ayaz Ahmad Wildlife Biologist M.Phil Zoology



29. Mr. Hammad ud Din
Assistant Forest Geneticist
M.Sc (Hons) PBG
Ph.D (in progress)



30. Dr. Salim SaifullahAssistant Forest Chemist
Ph.D (Organic Chemistry)



31. Mr. Wadood ShahPlant Physiologist
M.Phil (Botany)



32. Mr. Muhammad Farooq
Assistant Forest Ecologist
M.Sc (Forestry)
M.Sc (Botany)



33. Ms. Mahnoor Baloch Research Officer (Pathology) M.Sc (Hons) (Plant Pathology)



34. Mr. Sajid Durani Assistant Silviculturist (Mensuration) M.Phil (Forestry and Range Management)



35. Mr. Faizan AhmadResearch Officer (Watershed Sociology)
M.Phil (Forestry and Wildlife Management)



36. Mr. Muhammad SalmanResearch Officer, Silkworm Rearing
M.Sc (Hons) Entomology



37. Mr. Mir Manzar Ud Din Research Officer, Cocoon & Silk Technology M.Sc Chemistry, M.Sc (Hons) Agriculture Entomology



38. Mr. Zia Ur RahmanAssistant Economic BotanistM.Sc (Hons) Agriculture in Plant Breeding & Genetics



39. Mr. Abdur Rahman Khan Assistant Composite Wood Officer M.Phil (Chemistry) Ph.D (in progress)



40. Engr. Abdur Rehman MarwatPulp & Paper Officer (Technology)B.Sc Chemical Engineering



41. Mr. Mansoor Ali KhanAssistant Wood Seasoning Officer
M.Phil (Bio-Chemistry).



42. Engr. Muhammad Umair Khan Pulp & Paper Officer (Chemistry) BS (Engineering)



43. Mr. Khalid Imran
Assistant Silviculturist (Range)
M.Sc (Forestry)
M. Phil (Forestry and Wildlife Management)



44. Mr. Mian Armaghan-ul-Haq Lecturer in Forestry M.Sc Forestry M.Phil (in Progress)



45. Mr. Kamal AnwarForest ManagerB.S ForestryM.Phil (Forestry and Wildlife Management)



46. Mr. Asim KarimAssistant Silviculturist (Watershed)
B.Sc Forestry



47. Mr. Muhammad HashimAssistant Forest Economist
M.Phil (Economics)



48. Engr. Sulaiman Khan
Assistant Forest Engineer
B.Sc Civil Engineering ,
M.Sc Urban Infrastructure Engineering



49. Mr. Said Akhtar KhanAssistant Wood Technologist
DAE (Wood Technology)



















