



University of Agriculture, Faisalabad - Pakistan

- March, 2023 -



# **University of Agriculture Faisalabad A Historical Perspective**

Punjab Agricultural College and Research Institute, Lyallpur Established (1906)

Affiliated to the Punjab University

<u>√1917- BSc Agri</u> √1923 - MSc Agri √1942 - PhD

Upgraded as West Pakistan Agricultural University, Lyallpur in 1961 Now University of Agriculture, Faisalabad

# Vision

To lead the change through outstanding achievements in learning, discovery, innovation and community service with a clear focus on programs of significance to agricultural and rural development.

# Mission

In order to make Pakistan a prosperous, food-secured and resilient nation, UAF aims at the following goals

- $\bullet \ \ \text{To advance knowledge through basic and applied research}$
- To revamp human resource development by transforming the pedagogic process from teaching to learning
- To facilitate lifelong learning by providing agriculturally focused academic programs
- To promote agrarian reforms through research based agricultural policy
- To disseminate knowledge to the community through extension and outreach
- To promote sustainable farming and food systems, from production through consumption

# Officers and Authorities of the University

Officers

Chancellor

Pro Chancellor

Vice Chancellor

Pro Vice Chancellor

Deans

**Principals of the Sub Campuses** 

Chairmen/Directors/Director General

Registrar

Treasurer

Controller of Examinations

Librarian

**Authorities** 

Senate

**Syndicate** 

Finance and Planning Committee

**Academic Council** 

Selection Board

Graduate Studies and Research Board

**Faculty Board** 

**Board of Studies** 

**Affiliation Committee** 

Discipline Committee

**Campus Committee** 

Plagiarism Committee

Harassment Committee

# **University Faculties/institutes/ Directorates/Sub-campuses**

**FACULTIES** 

Agriculture Social Sciences

Animal Husbandry Sciences

Veterinary Sciences Food, Nutrition and Home Sciences

Agri. Engg. & Technology

#### **INSTITUTES**

National Institute of Food Science and Technology

Institute of Soil & Environmental Sciences

Institute of Horticultural Sciences

Institute of Microbiology

Institute of Physiology and Pharmacology

Institute of Business Management Sciences

Institute of Agricultural Extension and Rural Development

Institute of Agricultural and Resource Economics

Institute of Home Sciences

Punjab Bio-energy Institute

Confucius Institute



## **DIRECTORATES**

Office of Research Innovation & Commercialization (ORIC)

**Directorate of Graduate Studies** 

Directorate of Academics

**Directorate of External Linkages** 

**Directorate of Students Affairs** 

Directorate of Information Technology Resource Center and Data Bank (ITRCDB)

**Directorate of Sports** 

Directorate of Financial Assistance and University Advancement

Directorate of Human Resource

Directorate of Planning and Development

Directorate of Farms

Directorate of Procurement and Inventory Control (DPIC)

#### **SUB-CAMPUSES**

■ T.T. Singh Sub-campus ■ Burewala Sub-campus ■ Depalpur, Okara Sub-campus

Community College Postgraduate Agricultural Research Station (PARS)

## **CENTRES**

- Water Management Research Centre Pak-Korea Nutrition Centre (PKNC)
- Centre of Agricultural Biochemistry and Biotechnology (CABB)
- Centre for Advanced Studies in Agriculture and Food Security (CAS-AFS)
- French Cultural Center National Incubation Centre (NIC)
- Regional Centre of Plan 9 (PITB)
   Capacity Building Centre (CBC)

**LABS** ■ Central Hi-Tech Lab ■ Plant Tissue Culture Lab ■ Epidemiology Lab

- Veterinary Diagnostic Lab Molecular Parasitology and One-health Lab
- Water Quality Lab Medicinal Biochemistry Research Lab Fibre Textile Lab

# **University Faculty**

## Staff in Position

Professors	40
Associate Professors	168
Assistant Professors	175
Lecturers	209
Research Officers	19
Total	611

# **Academic Linkages**



The Universities signed 486 MoUs (National/International/ Public/Private)

# Graduates Produced (Since 1961) 137901

# **Postgraduate**

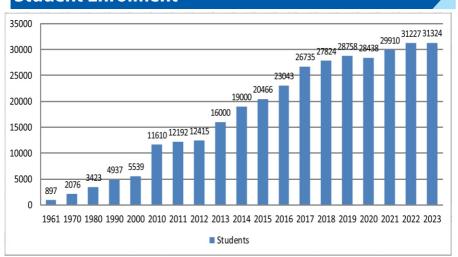
PhD 2256 MSc/MSc (Hons.)/MS/MPhil 73703

# **Undergraduate**

BSc/DVM/BSc (Hons.) 57321 BEd 2130 Intermediate 2514

Total 137,901

# **Student Enrolment**





# Infra-structure

Total area 880 ha

– Cultivated area 548 ha

Covered area 331 ha

Residential hostels 30

# **Facilities**

- Digital Library
- ICT Block
- Student Services Center
- Exhibition Center
- Sports Complex

# Technology Transfer and Skill Development

- Outreach and Community Service
- Exhibitions/Demonstrations
- Entrepreneurship
- Call Centers/Cyber Extension
- FM Radio/Distance Learning
- Civic Engagements/ Social Work/ Schools





# **Women Empowerment**

Country's Largest Women Hostel (1000 capacity)

Women Industrial Home (Variety of Skill Development Initiatives for Women)

Women Complex Comprising 4 Hostels (Lush green play grounds & other facilities)

Day Care Center (State-of-the-art facilities for little kids with professional staff)

Female Dispensary (Medical facilities for female campus community)

Massive increase in girls enrolment (Day by day number are increasing, surpassing boys)

New Women Hostel for 1000 Capacity funded by Punjab Government, 2022

Facilitation Center for day-scholar girls

Women sports complex

Bicycles for boarding girl students

# **Co-curricular Activities and Honours**

- There are 17 clubs/societies/forums/corps for capacity building of the students including three new forums such as Entrepreneurship Club, Freelancing Club, CSS Forum and Radio Club during 2022 under the Office of the Senior Tutor.
- The Tutorial Group Meetings (TGM) system is restructured into 268
  Tutorial Groups which engages more than 15,000 undergraduate students
  for their mentoring and character building through Co-curricular
  activities.
- Office of the Senior Tutor won 84 positions in various All Pakistan Level Inter-Institutional Literary Competitions during 2022. The notable institutions include GCU Lahore, FAST, PU, QU, UET Lahore, UVAS, MUST AJK, FJMU Lahore, FCCU Lahore, and KEMU Lahore etc.
- Senior Tutor Office also organized 48 events, including 7<sup>th</sup> Lyallpur Arts and Literature Festival, Gur Mela, Competitions, Workshops, Seminars, Motivational lectures and many more.
- Green Youth Movement (GYM) works for environmental protection through tree plantation.

# **University Sports**

- University Handball Team took part in Kamyab Jawan Sports Festival-2021
   at Islamabad and won 3<sup>rd</sup> position with Bronze Medal. In the same
   festival, Mr. Talha Masood, secured 3<sup>rd</sup> position with Bronze Medal in
   Boxing.
- Mr. Talha Masood, while representing UAF during National Championship at Lahore stood 3<sup>rd</sup> with Bronze Medal in Boxing
- University Cricket Team participated in HEC Intervarsity Championship at University of Sarghodha and declared **Zonal Champion** and qualified for the Final Round.

# **Agrivarsity Rover Scouts**

Mr. Jahanzaib Rafiq won the title of Best Hiker in 8<sup>th</sup> National Desert (Rambler Badge) Hike-2023 organized by Pakistan Boy Scouts Association.





Fatima Hall



**National Incubation Centre** 



**Exhibition Center** 



**Facilitation Centre for Day Scholars** 



Capacity Building Center (Model)



Centre for Advanced Studies



Confucius Institute (Model)



Lodging Facility 1000 Female Students (Model)



PKNC Building (Model)



Sensor Based Unmanned Aerial Agro-Chemical Spraying (UAAS) System



VegeBot – Kitchen Gardening Robot



Solar Continuous Roaster (SCR)





**Fodder Chopping Machine** 





Cottonized Hemp-Fiber for Denim Garments



**Drum-Hermetic Commodity Storage Container** 



# Office of Research, Innovation and Commercialization (ORIC)

Placed in "W" category with Top Position (82 Score) amongst all ORICs established in Pakistan by HEC (2012-2022)



# **UAF Research Portfolio (On-going Projects)**

Funding Agency	No. of Projects	Amount in Rs. (Million)
National Research Projects	462	1864.898
International Collaborative Research Projects	40	373.692
Total	502	2238.59
PSDP	09	5906.137
ADP	06	2478.285
G. Total	517	10623.012

# **Academic Strength**

- ➤ Degree Programs (202)
  - ❖56 Undergraduate
  - 146 Postgraduate
  - ♦809 Short courses
- Community College
- > Laboratory School System

# Research Strength

- Researchers (611)
  - PhDs: 470, Non -PhD: 132
  - **TTS: 273**
  - Research Officers: 19
- Postgraduate Researchers (2021-22): 8718
  - 889 PhD scholars
  - \* 8659 MSc/MS/MPhil students

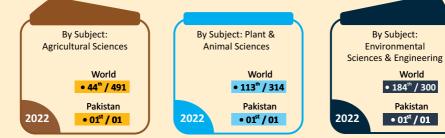




# (Organization office in London)









# **Technologies Developed/Commercialized**

- 1. Cottonized Hemp Fibers for Application in Denim Garments
- 2. Sisal Decorticator
- 3. Fibers from the Waste of Banana Plant
- 4. Multi-tasking Machine for Precision Sowing of Row Crops
- 5. Fodder Chopping Machine
- 6. Zone Disk Tiller
- 7. Sensor Based Unmanned Aerial Agro-Chemical Spraying (UAAS) System
- 8. Fruit & Vegetable Sterilizer
- 9. Android Soil Moisture Meter
- 10. Portable Water Monitoring System
- 11. VegeBot Kitchen Gardening Robot
- 12. Artificial Intelligence Based Prediction System for Textile Processing Industry
- 13. Multi Nutrient Liquid Fertilizer (NeeRoGAH)
- 14. Solar Continuous Roaster (SCR)
- 15. Solar Dehydrator
- 16. Solar Distillation System
- 17. Solar Drying Cabinet
- 18. Solar Milk Chiller
- 19. Solar Based Desalination System Through Reverse Osmosis (Pv-Ro)
- 20. Variable Height Self-Propelled Multicrop Sprayer
- 21. Dip & Grow A Biostimulant
- 22. Uni-Grow Soil Conditioner: A Low pH Organic Product
- 23. Plant-based Superabsorbent Polymers
- 24. Burrakh-A Bacterial Bioherbicide
- 25. Rhizogold Plus: A Biofertilizer for Wheat and Maize Production from Salt Affected Soils
- 26. Rhizogold: A Bio-fertilizer for Legume
- 27. Biostimulant Based Liquid Fertilizer
- 28. Uni-Micropower
- 29. New Premium Quality Mango Genotypes for Extended Harvest Season
- 30. Herbicide-tolerant (CABB-HTS) and Insect-resistant (CABB-IRS) Sugarcane
- 31. Anti-fungal Transgenic Sugarcane
- 32. Insect-resistant Chloroplast Transgenic Potatoes
- 33. Subunit and Biopeptide Vaccines against Livestock and Poultry Diseases
- 34. UAF-Gro: A Low Cost Indigenous Soilless Organic Substrate
- 35. New Specialty Cut Flowers for Diversification
- 36. Rosa centifolia UAF: A High Yielding Rose Strain for Value Addition
- 37. Golden Princess' & 'Golden Beauty Calendula: UAF Registered Varieties
- 38. Controlled Atmosphere Technology for Storage of Fresh Fruits & Vegetables

- 39. Changing Cultivars in Existing Citrus Orchards through Top Working
- 40. Modified Sun-drying Techniques for Dates
- 41. Strawberry Packaging in Plastic Punnets
- 42. Sanitized Citrus Nursery
- 43. Sanitized Guava Nursery Production Technology
- 44. Anaaji Drum-Hermatic Commodity Storage Container
- 45. Utilization of Rice Industrial Waste for Oil Extraction and Value Added Products
- 46 Modified Bran Flours
- 47. Post-Mortem Aging Technology: A Way to Improve Nutritional and Sensorial Quality of Meat
- 48. Enhancing Value Addition of Milk by Developing Specialized Cheese and Cheese Spread
- 49. Protocols for Commercially Processed Products of Mango, Kinnow, Potato and Tomato
- 50. Extreme Rainfall and Flood Monitoring System
- 51. Mastitis Diagnostic Kit / Mastitis Vaccine
- 52. Swab Test on Animal Food for the Detection of Antibiotic Residues in Meat, Milk and Eggs
- 53. BIOMOSKILL PLUS: A Technology for the Control of Mosquito Larval Population in Water
- 54. Bio-Dewormer Powder
- 55. Golden Nuggets: Animals Feed from Citrus Pulp Waste
- 56. UniGold-A Naked Neck Poultry Breed
- 57. PB-896- A Promising Cotton Line at Final Stage of Approval as Variety
- 58. Natural Menthol Crystals
- 59. Portable Solar Umbrella
- 60. High Yielding Sorghum for Kharif Fodder
- 61. Vermitechnology: Converting Trash into Cash

# **Technology Development Fund**



# (A joint venture of HEC, Academia & Industry)

Total projects awarded: 202 UAF: 24 No other university with >15

projects





# **Patents Registered: 24**

### Patent No: 138401/2005

New Technology of Mass Rearing of Chrysoperla carnea

Prof. Dr. Muhammad Ashfaq (T.I)

### Patent No: 138402/2005

Mass Rearing Technology for a Larval Parasite Brancon hebetor on Commercial Scale

Prof. Dr. Muhammad Ashfaq (T.I)

## Patent No: 138398/2004

**Mineral Supplement Packet** 

Prof. Dr. Muhammad Ashfaq (T.I)

#### Patent No: 139296/2005

A Zone Disk Tiller Drill

Prof. Dr. Muhammad Igbal

#### Patent No: 139291/2005

**A University Boom Sprayer** 

Prof. Dr. Muhammad Igbal

#### Patent No: 139290/2005

A University Boom Sprayer Test Bench

Prof. Dr. Muhammad Igbal

### Patent No: EP 2866541 B1/2019

Method for producing plant seed containing endophytic bacteria

Dr. M. Naveed

#### Patent No: 138744/2005

Nucleotide sequence analysis of the Hypervariable region of Hexon gene of Fowl adeno virus 1 serotype 4 from Pakistan

Prof. Dr. Muhammad Mansoor Dr. Iftikhar Hussain

#### Int. Patent No: Us10362787 B2/2019

Method for propagating microorganisms within plant bioreactors and stably storing microorganisms within agricultural seeds

Dr. M. Naveed

#### Int. Patent No: ES 2589171/2017

Method and istallation for extraction and purification of essential oils from natural resins to produce dynamic flavors and fragrance

Dr. Asif Hanif

#### Patent No: US 10,271,554, B2/2019

**Plant Containing Beneficial Endophytes** 

**Dr. Muhammad Naveed** 

## Patent No: 143349/2020

Flow velocity measurement by impact surface mechanism

Dr. Uzair Oamar

#### Patent No: 143588/2020

Climate smart storage technology

Dr. Ifran Afzal

### Patent No: 144012/2022

Method of intelligently prognosticating the shade hange of dyed knitted fabric after finish application

Dr. Assad Faroog

### Patent No: US 0283690/2020

Cobalt Hydroxystannate Nanocube Fuel Additive

Dr. Saba Jamil, Dr. Shanza Rauf Khan

#### Patent No: 143806/2021

A Multi-Strain novel bioformulation of bacterial strains for leguminous crops

Prof. Dr. Zahir Ahmad Zahir

#### Patent No: US 10882029/2020

Graphene Oxide and Cobalt Tin Oxide Nanocomposite and Method of Use

Dr. Saba Jamil, Dr. Shanza Rauf Khan

#### Patent No: 143845/2021

Thermal oil based solar roaster Dr. Anjum Munir

#### Patent No: 144069/2020

Novel Process for rapid detection of sulfenamide residues in dairy milk

Dr. Fagir Muhammad

#### Patent No: 143974/2022

Scope-Up: Solar Cold Storage for Perishables with Energy-Efficient Ultimate Cooling Pads Dr. Anjum Munir

#### Patent No: 143872/2022

A Novel indigenous organic soilless substrate for containerized plant production

Dr. Iftikhar Ahmad

#### Patent No: 143999/2022

Inline airflow solar assisted food dryer for reducing energy and drying heterogeneity

Dr. Waseem Amjad

# Patent No. 144059/2020

Polyherbal-mineral vitamin based supplement formulation for the enhancement of growth performance and immunity in poultry

Dr. Sibtain Ahmad

# Research Publications (with & without Impact Factor of UAF from Google Scholar 31.01.23)

