ANNUAL REPORT 2019-20





Report Prepared by:

Directorate of Planning & DevelopmentThe University of Agriculture, Peshawar - Pakistan

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VISION

Enhanced Food Security and Sustainable Livelihood Through Knowledge Based Economy

MISSION

To Promote, Enhance & Maintain Quality Education by Producing Competent Human Resource and Conducting Result Oriented Research to Achieve Food Security & Socio-Economic Development of the Society Through Innovation & Core Values

Vice Chancellor's Message

The University of Agriculture Peshawar has proved to be the leading University, providing quality education and need based basic and applied research in the country. The University is already in the process of strengthening its academic programs and research activities in accordance with the ever changing needs of food security and climate change effects in the country, which makes it as unique and specialized institutions in the country and in the region.

Having availed the opportunities of quality education in agriculture, Management and Computer Sciences, the graduates of the University are serving in public and private organizations on key positions within the country and abroad. They are our ambassadors and have been bringing laurels to the name and prestige of the country as well.



The rapid changing world scenario and globalization has also diverse effects on education and learning. The access to information move to click on computer and the use of information technology has made available new way for virtual learning. The university is effectively playing its role new scenario in the in training the future leaders

The University provide an ideal environment for learning and research in agriculture and applied sciences to the students. Each year the number of students applied to its various degree program of the university increase and university staff fully facilitate the enrolled student in achieving its goal of training in higher studies. To support the students the university offering number of scholarships program with support of its partner to needy and meritorious students. To meet the expanding demands the university is investing huge amount in expansion of new academic infrastructure and equipped the laboratory with the new instruments and scientific equipment's. The university has also played effective role in transferring the knowledge and technology to farmer fields through it's out-reach program by training the farmers and agriculture department's staff.

The annual report give an account of university performance and achievement during the year. The report also highlighted the future and the present status of its vision and endeavours.

Prof. Dr. Jehan Bakht(Fulbrighter)
Vice Chancellor

Executive Summary

This summary provides an overview of the operations, achievements and development of the University during 2019-20. In the reporting year, the University has continued to be blessed with energetic leadership and carry on the journey of progress and advancement. In spite of financial constraints, it has attained better governance with support of the statutory bodies, academic progress, and development of new infrastructure and continued smooth functioning by effectively engaged faculty, researchers, staff, and students. This has allowed the university to leap forward in pursuit of its vision and mission. Significant landmark achievements are summarised here;

- i. In the academic year 2019-20, the University produced 32 PhDs, 64 M. Phil, 295 M.Sc. (Hons) Agriculture and 635 B.Sc. (Hons) Agriculture. The University also produced 804 graudates in other BS and MBA programmes on self support basis. This also included 71 post graduates in MS Management Science & Computer Science.
- **ii.** The faculty was facilitated in presenting their research in domestic and foreign conferences, and seminars. They completed and have been working on more than 60 research projects won through open competitions.
- **iii.** Based on their research and exploration, the faculty and researchers have published quality research papers in reputed national and international journals, books, and book chapters.
- **iv.** The University pursued and encouraged research collaboration with organizations and institutions of higher reputation and signed MoUs during the reporting year.
- v. The faculty and researchers have also been actively involved in community services by engaging those in need of professional consultation regarding agriculture, livestock and other allied sciences. Like research dessimination through conferences, this year too, community interactions for improvement of the agriculture and general wellbeing of the farming community have been exercised. These activities also include short term trainings, consultancies and outreach activities on the farmers' fields.
- **vi.** The physical and technical infrastructure of the university continued to be enhanced and strengthened. Two ongoing developmental projects were being implemented one each from ADP and PSDP during 2019-20. This includes a mega developmental project titled: "*Establishment of Technology Development Centre (TDC) at the University of Agriculture, Peshawar*". Similarly establishment of Sub campus at Swat and reflection of Rs. 3000 million in the ADP for a permanent University is another landmark achievement.
- vii. Students were facilitated through scholarships, and provision of healthy environment in hostels and on campuses. They were also encouraged to participate in different co-curricular activities i.e. sports, dramas, debates, awareness sessions and other healthy activities organized by the University and other institutions.

About The University

Since its establishment in 1981, the University has been playing a vital role in imparting Agricultural education and conducting basic and applied agricultural research throughout the Province and disseminating the research findings among the farmers and general public through various initiatives. The graduates are serving in public and private sector organizations on key positions within Pakistan and abroad.

The University has six (06) Faculties, twenty three (23) teaching Departments, four (04) Institutes, one (01) Centre and two sub campuses which offers Bachelor, Master, M.Phil. and PhD degrees in all disciplines of Agriculture, Animal Husbandry & Veterinary Sciences, Rural Development, Rural Sociology, Biotechnology, Management Sciences, Information Technology and Computer Sciences. All these academic programmes are run under the supervision of 395 highly qualified faculty out of which 180 hold Ph.D. degrees from leading Universities of international repute. Names of the Faculties, Departments, Institutes, Sub-Campus and Centre are given below:

Faculties, Institutions & Departments of the University:

• Faculty of Crop Production Sciences

- o Department of Agronomy
- o Department of Horticulture
- o Department of Soil & Environmental Sciences
- o Department of Agricultural Mechanization & Renevable Energy Technologies
- o Department of Water Resources Management
- Department of Plant Breeding & Genetics
- o Institute of Biotechnology & Genetic Engineering

• Faculty of Crop Protection Sciences

- o Department of Plant Pathology
- Department of Plant Protection
- o Department of Entomology
- Department of Weed Science & Botany

• Faculty of Nutrition Sciences

- Department of Food Science & Technology
- o Department of Agricultural Chemistry & Biochemistry
- Department of Human Nutrition

• Faculty of Animal Husbandry & Veterinary Sciences

- o Department of Poultry Science
- o Department of Animal Nutrition
- o Department of Livestock Management, Breeding & Genetics
- o College of Veterinary Sciences

• Faculty of Rural Social Sciences

- o Department of Maths, Statistics, & Computer Science
- Department of Islamic & Pakistan Studies
- o Department of Agricultural Extension Education & Communication
- o Department of Agricultural & Applied Economics
- Department of Rural Sociology
- Department of English
- o Institute of Development Studies

• Faculty of Management & Computer Sciences

- o Institute of Business & Management Science
- o Institute of Information Technology & Computer Sciences
- Climate Change Centre (CCC)
- Agricultural University Peshawar, Amir Muhammad Khan (AMK) Campus, Mardan
- Agricultural University Peshawar, Sub Campus, Swat

The University has three research Journals i.e. Sarhad Journal of Agriculture, Weed Science Journal of Pakistan and Al-Azhar in which valuable research outcomes are shared with wider scientific community across the globe.

Research publications are considered hallmark of any R&D institution. The faculty has published research on different aspects of the agriculture, livestock, water and social sciences related issues in a variety of nationally and internationally recognized research journals.

Chapter-1

UNIVERSITY GOVERNANCE

The University of Agriculture, Peshawar, after the promulgation of Khyber Pakhtunkhwa Universities Act, 2012 (Amended 2016) reframed its Statutes 2016 and got it approved from the relevant statutory bodies of the University. Currently the University is governed under its newly approved Statutes through the following statutory bodies:

- i. The Senate
- ii. The Syndicate
- iii. The Academic Council

The composition of these authorities is complete and working under the Act. Additionally, the following authorities have been established as enshrined in the Universities Act to appropriately manage matters concerning the University academics, finances, students' affairs, merit-based selection of faculty and other staff.

- i. Selection Board
- ii. Finance & Planning Committee
- iii. Board of Faculties
- iv. Board of Studies
- v. Advanced Studies & Research Board
- vi. University Discipline Committee

The Senate

Senate has the power of general supervision over the University and shall hold the Vice-Chancellor and the Authorities accountable for all the functions of the University. The Senate shall have all powers of the University not expressly vested in an Authority or Officers by the Act and all other powers not expressly mentioned in the Act that are necessary for the performance of its functions. The 7th meeting of the Senate was held on Noveber 26, 2020 under the chairmanship of Mr. Shah Farman, Chancellor/Governor, Khyber Pakhtunkhwa.

The Syndicate

The Syndicate is an executive body of the University which exercises general supervision over the affairs and governance of the University subject to the provisions of the Khyber Pakhtunkhwa

Universities Act, 2012 and Statutes, 2016. During 2019-20, three meetings were held as per the following schedule:



Syndicate Meetings during 2019-2020

Meetings	Date
103 rd meeting	July 31, 2019
104 th meeting October 7, 2019	
105 th (Special) meeting	June 2, 2020







Prof. Dr. Jehan Bakht, Vice Chancellor Chairing Syndicate Meeting

The Selection Board

The Selection Board is a recommending body with the mandate to consider all eligible applications for teaching and administrative positions. The Board provides equal opportunities to all and recommendation/evaluation of the interviews is presented to the Syndicate for final decision. During the reporting period the 88th meeting of Selection Board was held on June 26, 2020.

The Academic Council

The Academic Council is a principal academic body of the University mandated with to lay down proper standards of instruction, research and examinations and to regulate and promote the academic life of the University, Colleges and Institutions, subject to the provision of the Act and Statutes.

During 2019-20, following listed meetings of academic council were held:

Meetings	Date			
40 th meeting	April 18, 2019			
41st meeting	October 3, 2019			
42 nd meeting	May 21, 2020			











The Board of Faculty

Functions of the Board of Faculty (BoF) include: to coordinate teaching and research work in the subjects assigned to the faculties and to scrutinise the recommendations of the Boards of Studies for further reporting to the Academic Council. The BoF besides looking into students' scholars matters also perform such other functions as may be assigned to it.

The Board of Studies

The Board of Studies have advisory role in all academic matters connected with the instructions, research, publications and examination in the subject(s) concerned. Additionally, the Board also proposes curricula and syllabi for all the degrees, diplomas and certificates courses in the subject(s) concerned.

Advanced Studies & Research Board (ASRB)

The ASRB is an advisory and executing body on all matters connected with the promotion of Advanced Studies (postgraduate), publication and research in the University. It is also mandated to process post graduate curricula, dissertations evaluation reports, panels of papers setters and examiners for comprehensive (written and oral) examination in light of recommendations made by the Board of studies. Nine meetings of Advanced Studies & Research Board (44th – 52nd) held during 2019-2020 under the chairmanship of Vice chancellor. Deans and senior faculty members participated in the board's meeting.

The Finance & Planning Committee (F&PC)

F&PC is mandated to advise on the annual statement of accounts, annual and revised budget estimates and to review periodically the financial position of the University. It advises the Syndicate on all matters relating to planning, development, finances, investment and accounts of the University. It also prepares short and long term academic development plans including staff and resource development.

Meetings details of F & PC during the reporting period is as under:

Meetings		Dates
76 th meeting	September 23, 2019	
77 th meeting	May 20, 2020	



Brief of important Decisions made by the Syndicate in 104^{th} and 105^{th} Meetings:

104th Syndicate: -

The Financial Management Committee constituted by the Syndicate in 103rd meeting completed its task and report of the Committee was placed before 106th meeting of Syndicate held on December 24, 2021 for consideration.

The Syndicate in its 104^{th} meeting held on October 07, 2019 approved minutes of 76^{th} meeting of F&PC. Main items approved in the meeting included: -

- 1. Approval of various allowance/Claims
- 2. Creation of 12 Office Assistants and 33 Class-IV positions.

The Syndicate in 104th meeting held on October 07, 2019, approved the following recommendations of the 41st meeting of Academic Council:

- 1- Conversion of Takhta Band Research Center into Agriculture University Campus, Swat.
- 2- Lunching of Post Graduate degree Programmes in the Department of Animal Health (College of Veterinary Sciences).
- 3- Amendments in the Financial Assistance/ Scholarship Rules & Regulation.

The Syndicate also approved/Authenticated minutes of the Site Selection Committee for Establishment of Technology Development Centre (TDC) Project.

The Syndicate also authorized the Vice Chancellor to appoint;

- 1- Chairman, Department of Agricultural Extension Education & Communication
- 2- Chairman, Department of Soil & Environmental Sciences
- 3- Chairman, Department of Human Nutrition

105th Syndicate: -

The Syndicate in its 105th meeting recommended the Actual Budget 2018-19, Revised Budget Estimation for 2019-20 and Budget Estimates for 2020-21 (Recurring) for approval of the Senate.

The Syndicate also approved most of the recommendations of the 88th Selection Board meeting held on June 26, 2020. The following officials were recommended for appointment/ promotion in the Syndicate.

- 1- Promotion of Syed Lufur Rahman, Additional Director to Director Works (BS-20)
- 2- Promotion of .04 Assistant P&D Officers (BS-17) as Deputy Director P&D (BS-18)
- 3- Promotion of Mr. Saiful Jamal as Law Officer (BS-17)
- 4- Promotion of Mr. Abdur Rehman, as Assistant Librarian (BS-17)
- 5- Regularization of 02 Assistant Director FAD, 02 Assistant Director IT, and 02 Assistant Treasurer.
- 6- Promotion of Engr. Zarif Khan, Assistant Engineer as Executive Engineer (BS-18)
- 7- Promotion of 06 Office Superintendents to positions of Officers cadre.

The Syndicate also approved appointment of: -

- 1- Chairman, Department of Weed Science
- 2- Chairman, Department of Plant Protection
- 3- Director, Institute of Biotechnology & Genetic Engineering
- 4- Director, Institute of Development Studies
- 5- Chairman, Department of Entomology
- 6- Chairman, Department of Poultry Science
- 7- Chairman, Department of Agronomy
- 8- Chairman, Department of Plant Breeding & Genetics
- 9- Chairman, Department of Livestock Management & Breeding & Genetics
- 10-Chairman, Department of Agricultural Mechanization & Renewable Energy Technologies

The Syndicate in 105th meeting recommended the Proposed Annual Plan of Work as well as Key Performance Indicators (KPIs) for the Financial Year 2020-2021 for approval of the Senate.

Affiliation Committee

The Affiliation Committee is an advisory body for recommending affiliation of colleges/ institutes to the Syndicate after reviewing the infrastructure and other facilities required for imparting standard education.

University Discipline Committee

The Discipline Committee deals with all inter-institute cases of indiscipline in the University. It proposes regulations relating to the conduct of University students, maintenance of discipline and action for breach of discipline. The Committee is mandated to recommend suspension, expulsion or rustication of students, on the basis of inquiry conducted under the rules.

List of Senate members

S#	Position	Current Statues
1.	Chairperson/Chancellor	Ex-officio
2.	The Pro Chancellor	Ex-officio
3.	The Vice Chancellor	Ex-officio
4.	One member of the Provincial Assembly of the Khyber Pakhtunkhwa to be nominated by the Speaker of the said Assembly	Arbab Jehandad Khan Member of Provincial Assembly
5.	A retired Judge to be nominated by the Chief Justice of Peshawar High Court;	Justice (R) Miftahuddin Khan
6.	Secretary to Government of Khyber Pakhtunkhwa, Agriculture Department	Ex-officio
7.	The Secretary to Government, Higher Education Department or his nominee not below the rank of Additional Secretary	Ex-officio
8.	The Secretary to Government, Finance Department or his nominee not below the rank of Additional Secretary	Ex-officio
9.	The Secretary to Government, Establishment Department or his nominee not below the rank of Additional Secretary	Ex-officio
10.	The Chairman, Higher Education Commission or his nominee not below the rank of Director General	Chairman HEC
11.	One eminent or distinguished graduate of the University who is not its employee to be nominated by the Chancellor;	Dr. Ayesha Baig, Assistant Professor COMASTS Institute of IT, Abbottabad.

S #	Position	Current Statues
12.	Two persons from the academic community of the Province of the Khyber Pakhtunkhwa or the country, other than an employee of the university, at the level of Professor or Principal, to be appointed by the Chancellor;	 Prof. Dr. Asif Khan Vice Chancellor University Peshawar. Prof. Dr. Arshad Javed Vice Chancellor Khyber Medical University, Peshawar.
13.	Four University Teacher, including one Professor, one Associate Professor, one Assistant Professor and one Lecturer to be elected by teachers of their respective cadres from amongst themselves	 Prof. Dr. Abbasullah Jan Dr. Gohar Ayub Associate Professor Dr. Amjid Usman Assistant Professor Dr. Irfanullah Lecturer
14.	Four persons from society at large being persons of distinction in the fields of administration, management, education, academics, law, accounting, medicine, fine arts, architecture, industry, agriculture, science, technology and engineering with a view to reflecting a balance across the various fields, to be nominated by the Chancellor:	 Prof. Dr. Iftikhar Ahmad Vice Chancellor Abbottabad University of Science & Technology, Abbottabad Mr. Muhammad Zafar Tahirkheli Atiq Law Associates, Peshawar Prof. Dr. Habib Ahmad Ex-Vice Chancellor Islamia College University Peshawar Dr. Muhammad Javed Khan, Principal Research Officer. (Plant Physiology Programme) Agriculture Research Institute, Tarnab, Peshawar
15.	One University Administrative Officer to be elected from amongst all the Administrative Officers in the prescribed manner.	Dr. Abdus Salam Director Internal Audit
16.	Observer	Director Quality Assurance

List of Selection Board Members

S.No.	Name/Designation of Member
1.	Vice Chancellor
2.	Dean of the Faculty concerned
3.	The Chairperson of the Teaching Department/Director of the Institute concerned
4.	Syed Muhammad Javed
	Member, Khyber Pakhtunkhwa Public Service Commission, Peshawar
5.	VACANT
	One member of the Syndicate nominated for the Selection Board
	i. Prof. Dr. Riaz Khattak
	Person of eminence, nominated by the Chancellor
	ii. Prof. Dr. Fida Younus Khattak
	Person of eminence, nominated by the Chancellor
6.	Three subjects experts from the standing list of subject experts approved by the Syndicate for teaching positions while one of them has to be a Psychologist in case of Lecturer and Assistant Professors and BS-17 to BS-20 in case of officers;
	As per relevant statutory provisions, the Syndicate on the recommendations of Selection Board approved the proposed subject experts for evaluation of credential for the positions of Associate Professors and Professors and as subject expert on Selection Board for Lecturers and Assistant Professors.
7.	Head of the concerned Directorate/Setup (in case of appointment of Administrative staff)
8.	The Registrar of the University (Secretary)

List of Academic Council Members

S.No.	Name/Designation of Member	Constituency			
1.	Vice Chancellor (Chairperson)	Ex-officio			
2.	All Deans	Ex-officio			
3.	All Chairmen	Ex-officio			
4.	All Professors	Ex-Officio			
5.	Director IDS	Ex-officio			
6.	Director IBGE	Ex-officio			
7.	Director IBMS	Ex-officio			
8.	Director Teaching	Ex-officio			
9.	Director ASRB	Ex-officio			
10.	Director Quality Assurance (Obsrever)	Ex-officio			
11.	Controller of Examination	Ex-officio			
12.	Director AMK Campus	Ex-officio			
13.	Registrar (member-cum- Secretary)	Ex-officio			
14.	Dr. Saima Hashim, Weed Science	Associate Professor			
15.	Dr. Anwar Ali Shad, Agricultural Chemistry	Associate Professor			
16.	Dr. Ibad Ullah Jan, College of Veterinary Sciences	Assistant Professor			
17.	Dr. Toheed Iqbal, Entomology, AMK Campus	Assistant Professor			
18.	Dr. Amjad Ali, Agricultural & Applied Economics	Lecturer			
19.	Dr. Muhammad Shahid Khan, AMK Campus	Lecturer			

Chapter -2

ACADEMIC ACTIVITIES

Academic Programmes (Undergraduate and Postgraduate)

The University offers Bachelor, Master, DVM, M.Phil. and PhD degrees in all disciplines of Agriculture, Animal Husbandry & Veterinary Sciences, Rural Development, Rural Sociology and Biotechnology; and Bachelor, Master and MS degrees in Management Sciences, Information Technology & Computer Sciences.

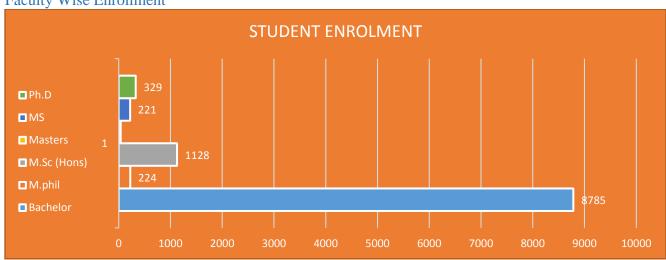
The University offers various postgraduate and undergraduate degree programmes in 23 departments and 03 institutes of 06 faculties i.e. Faculty of Crop Production Sciences, Faculty of Crop Protection Sciences, Faculty of Animal Husbandry & Veterinary Sciences, Faculty of Nutrition Sciences, Faculty of Rural Social Sciences, and Faculty of Management and Computer Sciences.

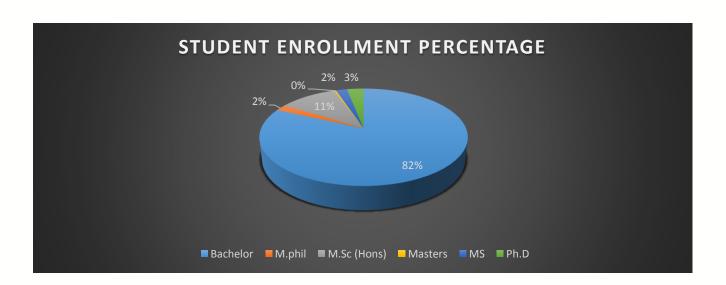
Department and Degree wise Programmes

Departments	Faculty/ Institutes	Degrees programmes
Agronomy Horticulture Plant Breeding & Genetics Soil & Environmental Sciences Water Resource Management Agricultural Mechanization & RET	Faculty of Crop Production Sciences	B.Sc. (Honors) M.Sc. (Honors) PhD
Entomology Plant Pathology Plant Protection Weed Science & Botany	Faculty of Crop Protection Sciences	B.Sc. (Honors) M.Sc. (Honors) PhD
Agricultural Chemistry & Biochemistry Food Science & Technology Human Nutrition	Faculty of Nutrition Sciences	B.Sc. (Honors) M.Sc. (Honors) PhD
Agricultural & Applied Economics Agriculture Extension Education & Communication Rural Sociology Mathematics, Statistics & Computer Science Pakistan/Islamic Studies English	Faculty of Rural Social Sciences	B.Sc. (Honors) M.Sc. (Honors) PhD MA Rural Sociology M.Phil. Rural Sociology
Livestock Management Breeding & Genetics College of Veterinary Sciences Animal Nutrition Poultry Science	Faculty of Animal Husbandry & Veterinary Sciences	B.Sc. (Honors) M.Phil./M.Sc. (Honors) DVM PhD
Institute of Business & Management Sciences (IBMS) Institute of Information Technology & Computer	Faculty of Management & Computer Sciences	BBA Honors MBA Honors BS (IT/CS Honors) MS (CS, IT, MS, Agribusiness)

Departments	Faculty/ Institutes	Degrees programmes		
Institute of Biotechnology & Genetic Engineering (IBGE)	Faculty of Crop Production Sciences	B.Sc. (Hons) Biotechnology M.Phil. Biotechnology PhD		
Institute of Development Studies (IDS)	Faculty of Rural Social Sciences	B.Sc. (Hons) Rural Development M.Sc. (Hons) Rural Development B.Sc. (Hons)Economics M.A & M.Phil. Economics PhD		

Faculty Wise Enrollment





University Student Strength 2019-20

S.No	Description	Number of Students						
		School	FA/F.SC	Bachelors	M.Sc (Hons)	M.Phil	PhD	Total
1	Main Campus	1989	179	8440	1331	224	329	10324
2	Mardan Campus			281	36			317
3	Swat Campus			63				63
	Total	1989	179	8784	1367	224	329	10704

Faculty Wise Enrolment 2019-20

Tacato (1) In Camera 2012 20										
FACULTY WISE ENROLLMENT										
FACULTY	Bachelor			Master	Master			M.Phil/PhD		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Faculty of Crop Production Sciences	122	186	308	39	448	487	28	99	127	1844
Faculty of Crop Protection Sciences	0	3	3	28	215	243	4	22	26	544
Faculty of Nutrition Sciences	68	42	110	146	170	316	10	19	29	910
Faculty of Animal Husbandry & Veterinary Sciences	66	488	554	13	207	220	7	51	58	1664
Faculty of Rural Social Sciences	206	5017	5223	13	88	101	23	66	89	10826
Faculty of Management & Computer Sciences	122	186	308	39	448	487	10	05	127	1732

Department Wise Enrolment For Session 2019-20

Degree	Department	2 0	1 9	2 0	2 0
		F	M	F	M
	Animal Health	6	65	16	59
	BSc (Hons) Agriculture	85	500	76	469
Bachelors	Institute of Biotechnology & Genetic Engineering	21	25	17	34
bacheiors	Institute of Business and Management Sciences (IBMS)	21	487	17	348
	Institute of Computer Sciences and Information Technology (ICS/IT)	20	723	28	692
	Institute of Development Studies	6	41	9	45
M.Phil	Animal Health	0	3	0	0
	College of Veterinary Sciences	0	0	1	4
	Institute of Biotechnology & Genetic Engineering	4	11	32	20

Degree	Department	2 0	1 9	2 0	2 0
	Institute of Development Studies	3	1	2	9
	Maths, Stats & Computer Science	1	2	0	0
	Rural Sociology	1	4	4	3
	Agricultural & Applied Economics	0	0	3	11
	Agricultural Chemistry & Biochemistry	0	0	6	9
	Agricultural Extension Education & Communication	0	8	1	2
	Agricultural Mechanization & Renewable Energy Technologies	0	1	0	0
	Agronomy	0	15	2	30
	Animal Nutrition	0	10	1	27
	Entomology	2	9	3	35
	Food Science & Technology	0	8	5	19
	Horticulture	3	22	6	70
M.Sc (Hons)	Human Nutrition	25	14	30	20
MISC (HOIIS)	Livestock Management, Breeding & Genetics	1	9	4	35
	Plant Breeding & Genetics	1	11	0	18
	Plant Pathology	1	3	7	12
	Plant Protection	0	17	4	27
	Poultry Science	0	12	2	19
	Rural Development	0	1	2	10
	Rural Sociology	0	2	1	5
	Soil & Environmental Sciences	0	13	0	22
	Water Resources Management	0	3	0	2
	Weed Science & Botany	0	2	0	1
Masters	Institute of Business & Management Sciences (IBMS)	0	0	0	13
	Institute of Business & Management Sciences (IBMS)	3	19	6	27
MS	Institute of Computer Sciences and Information Technology (ICS/IT)	5	35	7	55
	Agricultural & Applied Economics	0	2	2	0
	Agricultural Chemistry & Biochemistry	0	0	2	3
	Agricultural Extension Education & Communication	0	2	1	2
	Agronomy	1	2	0	11
	Animal Health	0	4	1	6
	Animal Nutrition	0	0	3	3
	Entomology	0	2	0	0
	Horticulture	0	6	2	6
	Human Nutrition	0	0	3	0
Ph.D	Institute of Biotechnology & Genetic Engineering	1	4	3	5
	Institute of Development Studies	0	0	1	4
	Livestock Management, Breeding & Genetics	0	1	1	3
	Plant Breeding & Genetics	0	4	0	0
	Plant Pathology	1	1	0	0
	Poultry Science	0	0	1	5
	Rural Development	0	3	2	7
	Rural Sociology	0	2	3	11
	Soil & Environmental Sciences	0	1	0	4

Academic Achievements

List of PhDs Produced during 2019-20

S.No	Scholar	Thesis Title	Supervisor	Date of Result
1.	Ms. Samrin Gul	Genetic Analysis for Yield and Quality Traits in <i>Brassica Napus L</i>	Prof. Dr. Raziuddin	02.05.2019
2.	Ms. Sadaf Qasim	Response of Local Crops to Ozone (O ₃) and Hydrogen Fluoride (HF) Pollution in Peshawar	Dr. Muhammad Nauman Ahmad	02.12.2019
3.	Ms. Mahwish Rehman	Effect of Essential Oils and other Chemicals against Varroa Mites in Honey Bee (Apis Mellifera L.)	Prof. Dr. Sajjad Ahmad	15.03.2019
4.	Mr. Zulqarnain	Fungal Extracts aginst Fusarium Wilt and Isolation of Their Antifungal Compounds Using Bioassay Directed Approach	Prof. Dr. Zafar Iqbal	29.05.2019
5.	Mr. Jahangir Khan	Factors influencing Household willingness to pay for pesticides free fresh apple in District Peshawar, Khyber Pakhtunkhwa(KP) Pakistan	Prof. Dr Abbas Ullah Jan	29.05.2019
6.	Mr. Aziz Ur Rahman	Stability Analysis of Rice Recombinant Inbred Lines	Prof. Dr. Syed Mehar Ali Shah	13.06.2019
7.	Ms. Kalsoom	Characterization of Bioactive Compounds from Selected Fungal Species	Prof. Dr. Zafar Iqbal	18.06.2019
8.	Mr. Monsif Ur Rehman	Identification of Superior Heterotic Combinations Using Population Hybrids in Maize	Prof. Dr. Hidayat ur Rahman	08.05.2019
9.	Mr. Fazl-e-Akbar	Prevalence of Fusarium Toxins: Ecology and Implications for Control of Tricothecenes and Zearalenone in Cereal Grains.	Dr. Sahib Alam	09.02.2019
10.	Mr. Azra Nadeem	Distribution, detection and characterization of <i>Bipolaris maydis</i> (Nisikado and Miyake) Shoemaker and screening of maize germplasm against the disease	Prof. Dr. Shaukat Hussain	09.12.2019
11.	Mr. Sadaf Rahim Awan	Isolation of Secondary Meta olites with Insecticidal and Herbicidal Potential from Selected Fungi	Dr. Mudassar Iqbal	18.11.2019

S.No	Scholar	Thesis Title	Supervisor	Date of Result
12.	Mr. Muhammad Ilyas	Stability Analysis of Bread Wheat Recombinant inbred Lines under Dry Land	Prof. Dr. Fida Muhammad	20.11.2019
13.	Mr. Wajid Khan	Estimates of Genetic Parameters in Rapeseed Using Diallel Analysis	Prof. Dr. Raziuddin	25.11.2019
14.	Ms. Hala Rajab	Enhancement of Oilseed Rape stress Tolerance through Sulfur Metabolic Engineering and Mutualistic plant- microbe Interaction	Dr. Muhammad Sayyar Khan	25.11.2019
15.	Mr. Ihsanullah	Effect of Stress on Reproductive Physiology of Various Grades of Crossbred Cattle Under Subtropical Conditions of North Western Pakistan	Prof. Dr. Muhammad Subhan Qureshi	28.11.2019
16.	Mr. Muhammad Naeem Khan	Phytochemical and Pharmacological Profiling of <i>Dysphania Botrys</i> L.	Prof. Dr. Asad Jan	16.12.2019
17.	Mr. Rahmatullah	Perceptions and Adaptation Strategies of Farmers regarding Climate Change in Baluchistan with special reference to Agricultural Extension Activities	Prof. Dr. Khalid Nawab	19.12.2019
18.	Ms. Asma Akbar	Identification and characterization of Fusarium spp infecting tomatoes in Khyber Pakhtunkhwa (Pakistan) and evaluation of host resistance	Prof. Dr. Shaukat Hussain	24.12.2019
19.	Mr. Rehmat Ullah	Investigation into Health and Environmental Hazards of Pesticides Use to Farming Community in Khyber Pakhtunkhwa, Pakistan.	Prof. Dr. Khalid Nawab	24.12.2019
20.	Mr. Ayat Ullah	An Investigation into the Role of Extension Services in Building Adoptive Capacity of Farmers in the Rainfed Areas of Khyber Pakhtunkhwa, Pakistan.	Dr. Ayesha Khan	24.12.2019
21.	Mr. Naseer Ahmad	Comparative Growth performance, immune status, Carcass and Egg Quality traits of Naked Neck, Rhode Island Red (RIR) and Black Astralorpe (Bal) chicken	Prof. Dr. Sarzamin Khan	03.02.2020

S.No	Scholar	Thesis Title	Supervisor	Date of Result
22.	Mr. Muhammad Arif	Exploring the consumption of Functional Foods in Relation to Metabolic Syndrome in apparently Healthy Adults	Prof. Dr. Saleem Khan	04.05.2020
23.	Mr. Asadullah	Study on prevalence and molecular characterization of mycobacterium in large ruminants in central zone of Khyber Pakhtunkhwa	Prof. Dr. Umar Sadique	04.05.2020
24.	Mr. Mazhar ur Islam	A Situational Analysis of Educational Policy Reforms 2013 Primary Education Southern Khyber Pakhtunkhwa	Prof. Dr. Mussawar Shah	16.07.2020
25.	Mr. Muhammad Hanif	Evaluation of a Flat Plate Solar Collector with Energy Storage for Drying of Selected Fruits and Vegetables	Prof. Dr. Mansoor Khan Khattak	20.07.2020
26.	Mr. Sadiq Shah	Effect of Edible Coating and Thyme Oil in Reducing Post Harvest Fungal Decay of Mango Fruit.	Dr. Majid Suhail Hashmi	21.07.2020
27.	Mr. Muhammad Abbas	Serum zinc concentration in association with current physical growth and scholastic performance of apparently healthy school going children	Prof. Dr. Saleem Khan	09.01.2020
28.	Mr. Shakeel Ahmad	An Analysis of Effectiveness of Rights Based Approach in Social Inclusion of Person with Disabilities in Rural Areas of Malakand, Pakistan	Dr. Asad Ullah	14.09.2020
29.	Mr. Muhammad Medrar Hussain	Characterization of <i>OsTZF8</i> gene encoding Tandem CCCH Zinc Finger Protein for Abiotic Stress Tolerance in Rice.	Prof. Dr. Asad Jan	16.09.2020
30.	Mr. Zafrullah Khan	Studies on Population Dynamics, Host Plant Response and Management of Myzus Persicae (Sulzer) in Potato Cultivars in Khyber Pakhtunkhwa.	Prof. Dr. Shah Alam Khan	16.09.2020
31.	Ms. Zelle Huma	Molecular Characterization and use of Entomopathogenic Nematodes as biological control agent against subterranean termites, Heterotermes Indicola (Wasmann) (Isoptera: Rhinotermitidae).	Prof. Dr. Ahmad-Ur- Rahman Saljoqi	16.09.2020

32.	Ms. Anjum	Improving wheat productivity through farmyard manure decomposition using organic and inorganic amendments	Dr. Ahmad Khan	18.09.2020
33.	Mr. Saif Ullah	Characterization of Wheat Varieties Grown in Khyber Pakhtunkhwa for Noodles Preparation.	Dr. Ihsan Mabood Qazi	18.09.2020
34.	Ms. Iffat Nawaz	Genetic Diversity in Indigenous Common Beans from Himalaya Region of Pakistan	Prof. Dr. Farhatullah	10.02.2020
35.	Mr. Farhana Gul	Assessing the socio economic impact of climate change on wheat production in Khyber Pakhtunkhwa, Pakistan	Prof. Dr. Dawood Jan	10.02.2020
36.	Mr. Muhammad Mushtaq	Study on the effects of Indigenous Medicinal plants on Serum Biochemistry, hepato-nephro Protection and Production Performance in layers	Dr. Naila Chand	11.02.2020
37.	Mr. Abid Ali	Genetic Analysis of Yield and its Contributing Traits in Maize	Prof. Dr. Hidayat ur Rahman	16.11.2020

Department and Discipline Wise Graduation M. Phil (18 Years) 2019-20

Department	M.Phil		
	Female	Male	Total
Animal Health	5	7	12
Institute of Biotechnology & Genetic Engineering	20	21	41
Institute of Development Studies	3	5	8
Islamic/Pakistan Studies	0	3	3
Maths Stat & Computer Science	2	5	7
Rural Sociology	3	12	15
Total	33	53	86

Department and Discipline wise Graduation M. Sc (Hons) Agriculture 2019-20

Department	N	M.Sc (Hons)		
	Female	Male	Total	
Agricultural & Applied Economics	1	1	2	
Agricultural Chemistry & Biochemistry	7	3	10	
Agricultural Extension Education & Communication	0	1	1	
Agricultural Mechanization & Renewable Energy Technologies	0	2	2	
Agronomy	2	20	22	
Animal Nutrition	2	21	23	

Department	M.Sc (Hons)		
Entomology	0	8	8
Food Science & Technology	4	19	23
Horticulture	4	18	22
Human Nutrition	12	19	31
Livestock Management, Breeding & Genetics	0	17	17
Plant Breeding & Genetics	6	10	16
Plant Pathology	1	5	6
Plant Protection	3	8	11
Poultry Science	0	6	6
Rural Development	0	5	5
Soil & Environmental Sciences	0	6	6
Water Resources Management	0	5	5
Weed Science & Botany	0	2	2
Total	42	176	218

Department and Discipline Wise Graduation B. Sc (Hons) Agriculture and DVM 2019-2020

	Bachelors		S
Department	Femal	Mal	Tota
	e	e	l
Agricultural & Applied Economics	4	8	12
Agricultural Chemistry	2	7	9
Agricultural Extension Education & Communication	1	8	9
Agricultural Mechanization & Renewable Energy Technologies	1	1	2
Agronomy	2	39	41
Entomology	2	23	25
Food Science & Technology	7	21	28
Horticulture	7	65	72
Human Nutrition	29	18	47
Plant Breeding & Genetics	0	15	15
Plant Pathology	3	13	16
Plant Protection	7	18	25
Rural Development	2	10	12
Rural Sociology	1	12	13
Soil & Environmental Sciences	1	28	29
Water Resources Management	0	1	1
Weed Science & Botany	1	10	11
College of Veterinary Sciences (DVM)	10	38	48
Institute of Business & Management Sciences (BBA Hons)	17	291	308
Institute of Computer Sciences & Information Technology (ICS/IT) BS (IT) BS (Computer Science)	11	243	254
Total	108	869	977

Chapter -3

RESEARCH AND DEVELOPMENT

Agriculture is the backbone of Pakistan, its contribution to country GDP is approx. 24%. The University of Agriculture through its research programme not only provide training to the postgraduate research students in basic and applied research but also carry out research that have national and global impacts. The faculty of the university applied to various competitive research grants through the Office of Research Innovation & Commercialization (ORIC) of the University. During 2019-20, ORIC submitted number of new research projects to various national and international funding agencies that include Higher Education Commission (HEC) programme through National Research Programme for the Universities, Pakistan Agricultural Research Council through Agricultural Linkages Programme (ALP) and the Ministry of Science & Technology through Pakistan Science Foundation (PSF).



Training Participants with the Vice Chancellor at the College of Veterinary Sciences

The faculty and researchers won number of the research projects from both national and international competitive grants. Various research endeavours of the faculty is briefly discussed below:

Integration of 1-Mcp and Hypobaric Treatments to Enhance the Storage Life of Apple Fruit

The Principal Investigator of the project is Dr. Majid Suhail Hashmi, Associate Professor, Department of Food Science & Technology. The project was funded by the Higher Education Commission, Islamabad.

Khyber Pakhtunkhwa is blessed with the production of many fruits and vegetable. Apple is one of the important fruits grown in temperate regions of Pakistan, especially Baluchistan and Khyber Pakhtunkhwa. However due to the lack of storage facilities and improper postharvest handling, most of the fruit waste (more than 30%) during their journey from orchard to consumer.





Principal Investigator briefs Prof. Dr. Jahan Bakht, Vice Chancellor regarding project activities in the Postharvest lab.

The postharvest research could be the missing link in producing premium quality fruits and vegetables. The research project found that Integration of 1-MCP and Hypobaric treatments could be beneficial to minimize postharvest losses of apple in Pakistan, which will improve the livelihood of farmers. In addition, the surplus fruit could be exported to other countries. One of the most important achievements of this project was the development of a postharvest lab with two cold storages in the Department of Food Science & Technology. The establishment of lab and availability of M. Scc postharvest equipment obtained through this project encouraged students to conduct research in

postharvest, currently 6 M. Sc (Hons) students are working in Postharvest lab with the Principal Investigator on Apple, Pear, Banana and Guava, which is benefitting the research culture in the department and will ultimately be useful for community and national economy in larger context in future.

Employing Plant Growth Promoting Bacteria in Phytoremediation of Foodborne Pathogens and Toxic Metals from Wastewater

The Principal Investigator of the project is Dr. Mehboob Alam, Department of Horticulture. The Project was funded by Higher Education Commission, Islamabad.

Foodborne pathogens and heavy metals can contaminate fruits and vegetables in the field during pre harvest handling as well as after harvest in the supply chain. In the field, application of wastewater is one of the major sources of contamination. Likewise, heavy metals including cadmium, lead, copper, chromium etc. can easily reach human body through contaminated fruits and vegetables and can cause gastrointestinal diseases, cardiovascular and respiratory problems, etc. According to WHO, millions of illnesses occur during the last few decades due to the consumption of contaminated fruits and vegetables. Normally, in the developing countries e.g. in Pakistan, farmers use wastewater without any treatment to raise their crops. Studies have shown that wastewater carries various kinds of pathogens, pollutants, heavy metals, etc. Therefore, wastewater must be treated before they reach the crops. Worldwide, numerous physical, chemical and biological techniques are in practice in order to minimize the levels of pollutants in wastewater. Majority of these processes are expensive and hence, poor farmers of Pakistan can't afford to install them in their field for treating wastewater before use. Therefore, a system that is cheap, reliable, easy to operate, non-technical and capable of minimizing the load of pollutants in wastewater is necessary for farmers to install for treating wastewater before use. To achieve these objectives, various experiments were carried out so as to know the microbial and heavy metals status in irrigation water and vegetables collected from different localities of Khyber Pakhtunkhwa. Similarly, constructed wetlands were built so as to achieve irrigation water free from contaminants.

Results from various experiments showed that irrigation water collected from different areas carried varying amount of microbial load and water sampled during the months of Jan/Feb and May/June carried high number of bacteria compared with other months of the year. Bacterial counts were high in leafy vegetables including Spinach, Coriander and Lettuce compared with other vegetables. Comparing various vegetables growing areas, it was seen that high numbers of bacteria on vegetables were observed in samples from Nowshera, Mardan and Peshawar, while lower were seen in samples from Abbottabad, Mansehra and Swat region. Results further indicated that irrigation water and vegetables have different bacterial community structure and composition at different taxonomic levels, but this segregation was not significant. *Alpha, Beta and Gamma proteobacteria*, that are groups of known pathogens and

opportunistic pathogens, was found in all samplings showing that these groups of bacteria can persist under different environment.

Results regarding heavy metals analysis indicated that in many cases heavy metal concentrations were found above the permitted levels as set by FAO/WHO, 2001. High concentrations of heavy metals were found in vegetable samples collected from Kohat, Karak, Mardan, Swat and Bannu, low heavy metals concentrations were observed in vegetable samples from Nowshera, Buner, Mansehra and D.I. Khan. In most of the cases taking into account the heavy metals allocation in plants, the order was: root > stems > leaves > edible parts. Similarly, irrigation water can carry heavy metals and the collected water samples from different regions showed presence of heavy metals in the water.



Wetland Constructed for Wastewater Treatment



Hydrophytes Installed in The Wet Land Wastewater Treatment

The Effect of Brassinosteroid and Chitosan on the Morphological and Biochemical Changes in Tomato under Drought Stress

The Principal Investigator of the project was Dr. Imran Ahmad. The project was funded by the Higher Education Commission, Islamabad. The project objective include: To investigate the influence of chitosan and brassinosteroids levels on tomato growth, physiochemical traits and yield under drought stress. Drought is on top among the endangered threats for food security and crop productivity in the ever-changing world climate which is becoming worse in near future. About 45% of agricultural lands worldwide are affecting due to drought. Water availability is imperious for higher crop growth, transpiration and nutrient translocation. Tomato food crops over the world is



also threatened from water stress at any stage and its growth and productivity enormously leading to large decline in yield. However, reproductive stage is more sensitive to drought causing significant yield losses.

In such situation, the condition becomes more serious due to increasing water scarcity worldwide. Therefore, improving both physiological and biochemical traits for higher yield of crops is still the endeavor of scientist. Water stress is the most important constraint affecting the productivity of all vegetable crops including tomato. Plants exposed to drought stress are severely affected and retard plant growth and development. Therefore, the current project entitled "The effect of brassinosteroid and chitosan on the morphological and biochemical changes in tomato under drought stress" was initiated. There were two experiments in this project. First experiment was "Response of chitosan concentrations promote to the



performance of tomato under drought stress". It has two factors such as chitosan and drought stress having different levels (0, 100, 200 and 300 mg/L) and (Stress free 100%, Mild stress 60% and severe stress 40%). The second experiment was "Efficacy of brassinosteroids concentrations on the growth, yield and quality of tomato grown under drought stress". It has also two factors such as brassinosteroid and drought stress having different levels (0, 2, 4, and 6 uM/L) and (Stress free 100%, Mild stress 60% and severe stress 40%). Field capacity was maintained with TDR moisture meter. Both the experiments were carried out in randomized complete block design (RCBD) having two factors and three replications. Experiments were conducted at Horticulture Research Farm, Department of Horticulture, The University of Agricultural Peshawar. Both the experiments were carried during 2018-2019 and were again repeated in the year 2019-2020. From both the experiments it was concluded that tomato plants under drought stress should be applied with 200 mg/L chitosan level and 6 uM/L brassinosteroid level for maximum growth, yield and quality.

"Identifying Candidate Gene in Differentially Expressed Gestation Length in Different Sheep Breeds and Climatic Conditions through Transcriptome and Epigenetic Analysis"

Prof. Dr. Sohail Ahmad, Institute of Biotechnology & Genetic Engineering (IBGE) is the PI of three research projects are under progress in the IBGE, these are "Identifying Candidate Gene in Differentially Expressed Gestation Length in Different Sheep Breeds and Climatic Conditions through Transcriptome and Epigenetic Analysis"; "Genome-wide association studies utilizing next generation sequencing to identify potential genetic selection markers for economic traits in diverse sheep populations-)" and :"Establishment of National Centre for Livestock Breeding, Genetics and Genomics (NCLBGAG) Sub-center AUP". Project activities and various research facilities developed under these projectsts are briefly discussed as under:

Twelve sheep breeds including 5 new varieties were identified and morphometrically defined. The breeds' specimens were collected from the field and stored under one roof but in separate cages at the University of Agriculture, Peshawar. Each breed had 12 ewes and two rams. All of the rams were housed in its own home. At the station, various reproductive experiments were conducted, and their needs were fulfilled accordingly. The majority of the breeding trials were carried out towards the start of the breeding season.

Specimens from all breeds were sequenced for the whole genome. Two of the breeds' genome sequences were bioinformatically examined and uploaded to the NCBI data library for reference. A workstation for this purpose was purchased, installed, and is now operating in the in-silico lab. The gene sequence and the traits were linked to discover QTL markers in genome-wide association studies of diverse phenotypes. These studies are presently underway, and 21 M Phil studies have either been completed or are nearing completion.

Other experiments were carried out to investigate the difference reproductive features, and their transcriptomes have been obtained, and are ready for sequencing. Many activities were slowed by the COVID embargo, which hampered the sequencing and other services required by the project.

For genomic selection, indigenous cow and buffalo breeds (Azikheli and Achai) have been chosen. A letter of partnership has been signed with DG L&DD Research and Extension for this aim. The collecting of data is now underway. For genomic selection, indigenous cow and buffalo breeds (Azikheli and Achai) have been chosen. A letter of partnership has been signed with DG L&DD Research and Extension for this aim. The RFID technology is being used to collect data. The system will be operational shortly. Field visits are now the most important activity for establishing characterization, performance, and association data analysis for discovering genetic markers in each breed.

Labs have been refurbished; facilities have been installed and brought to a fully working state with minimal biosecurity and biorisk. The installation of a solar system remedied the power outage problem. One f the labs qualifies a BSL-1 and second as BSL2 in status and function. All requirements for the purpose have been installed and brought to a fully working state with minimal biosecurity and biorisk. The power outage has been resolved through the installation of a solar system. In addition a third lab of in-silico lab has been also established with all the necessary elements. One of the lab has been supplied with the solar power backing system where all the times light is available and is facing no shortfall or interruption due to power failure. Both labs have biometric entry system installed for getting more precise entry and also serve as the future system of use and learning to the students working at the division.

For vegetative and fodder purposes, a hydroponic system is in place. At the University, there is one sheep house with capacity for 200 sheep heads. Cell culture and other biotechnology facilities have been built. The division also has one indoor lab aquarium with zebra fish.

Establishment of Incinerator in the Institute Biotechnology and Genetic Engineering (IBGE)

The University of Agriculture has got the facility of Incinerator at IBGE through the installation of the incinerator sponsored by ABM. The machine is energy efficient, effective, and heavy-duty machine worth PKR 2.5 million obtained under the project "Waste Disposal" led by Prof. Dr. Sohail Ahmad. The machine has the potential to treat waste created in all labs and whole University of Agricultural Peshawar. Initially the machine will operate once a week and soon it will expand the service to other institutes on greater campus.. In this regard, a training session will be conducted for the University's lab personnel, instructing them in the accumulation, sorting, and packing of lab trash before it is incinerated.

The problem of garbage buildup is reaching dangerous proportions all across the world. In Pakistan, the situation is even worse, with no adequate disposal of trash from laboratories and clinical/medical labs

other than dumping it in a landfill and mixing it with municipal garbage. All of these disposal methods have highly hazardous and dangerous implications. Incineration in a controlled atmosphere is the sole method for proper disposal. If not handled appropriately, it can endanger the life and health of the dealing worker/student as well as the community at large. Chemicals, glassware, plastics, and pathogens are among the elements present in lab trash and rubbish.

The Universities are characterized and graded by the quantum, type and function of labs it operates. The majority of the day is spent by students and professors engaged in various research activities and experiments. Bachelor students are studying many tests, while postgraduate students are conducting various studies and trials. All of this results in a comparable quantity of trash creation. If this trash/waste enters the food chain, it becomes lethal to humans, animals, plants, and soil and environmental bacteria. Many health difficulties, particularly chemical, microbes and heavy metal toxicity, cause muscular, physical, neurological, and degenerative disorders akin to Parkinson's, Multiple Sclerosis, muscular dystrophy, and Alzheimer's disease in those who consume such food.

Climate Smart' Agriculture for Steering Food Security by Fostering Cropping Intensity in Seasonal Gaps.

The Principal Investigator for the project is Dr. Muhammad Arif, Director Farm with Co-Principal Investigator Dr. Ishaq A. Mian. The project was funded by US-Pakistan Centre for Food Security.

The experiment was conducted at the Agronomy Research Farm of the University of Agriculture, Peshawar. Wheat-maize-wheat cropping pattern was followed for the experiments. The summer legumes were adjusted in the summer gap (the period after wheat harvesting up to sowing of maize) for grain, fodder and green manure purposes. Mungbean, cowpea and sesbania were used for grain, fodder and green manure purposes, respectively. A fallow was included in the experiment as control. Biochar was also applied to legumes at the rate of 0, 5 and 10 t ha⁻¹. Each plot of the previous legumes' experiment was split into four sub plots to accommodate four levels of N to maize crop. Maize was sown with four levels of N fertilizer (0, 60, 120 and 180 kg ha⁻¹) in mid July.

The results of the experiments revealed that previously grown legumes significantly increased plant height, grains ear⁻¹, thousand grains weight, grain and biological yield of maize crop. Previously grown sesbania crop proved superior as compared to other legumes and fallow plots. Similarly, application of biochar at the rate of 10 tons ha⁻¹ increased plant height, grains ear⁻¹, thousand grains weight, biological and grain yield of maize. Application of nitrogen significantly increased plant height, grains ear⁻¹, thousand grains weight, grain and biological yield. Application of 180 kg N ha⁻¹ produced taller plants, more grains ear⁻¹, heavier grains, more biological and grain yield in maize as compared to other levels of N and control.

Among different preceding crops, sesbania increased soil N, stover N and grain N content of maize. The effect of previously grown legumes was not significant on soil pH, soil EC, bulk density, soil Ca, Mg, Na and soil C content. Similarly, application of 10 tons biochar ha⁻¹ significantly increased stover N, grain N, soil C and soil N. Bulk density of the soil decreased with increasing biochar application. The soil pH, EC, soil Ca, Mg and Na content were not significantly affected by biochar application. Among different nitrogen levels nitrogen application at the rate of 180 kg ha⁻¹ significantly increased stover N and soil N. Grain N content were higher with all N application as compared to no N application. Soil PH, EC, bulk density, soil carbon, soil Ca, Mg and Na were not significantly affected by nitrogen application.

Assessment of Indigenously Developed Recombinant Inbred Lines in Rice for Commercial Cultivation in Khyber Pakhtunkhwa

The Principal Investigator for the project is Prof. Syed Mehar Ali Shah, Department of Plant Breeding & Genetics. In the Khyber Pakhtunkhwa most of the farmers are planting indigenous landraces. Moreover, there was lack of well-organized indigenous rice breeding program in Pakistan. Principal Investigator started Rice Breeding Program at The University of Agriculture, Peshawar and so far developed 100

advanced rice lines from the segregating generations of crosses of diverse parents. The prime focus of this project is the evaluation of these rice recombinants inbred lines (RILs) for yield and yield-related traits across different agroecological zones of Khyber Pakhtunkhwa across years. Across locations, the newly developed rice RILs AUP-3, AUP-29 and AUP-30 have displayed superior performance for maturity and yield attributes. On the basis of individual environments, rice lines AUP-3, AUP-29, AUP-30 and AUP-40 have excelled in performance for maturity, yield and yield related traits at Peshawar,



Swat, Manshera and Charsadda, respectively along with resistance against biotic and abiotic stresses. These genotypes need further testing for another year across locations for making recommendations for the commercial release as new rice cultivars. Moreover, these RILs are having diverse genetic make-up and the genetic potential of these genotypes for the desired maturity and yield related traits could be utilized in future rice hybridization programs.

Transfer of Modern Production Technology of Field Crops Cultivation to Farmers through Field Days and Trainings (Swat & Malakand)

The Principal Investigator for the project is Prof. Dr. Aman Ullah, Department of Agronomy. The

project was funded by US-Aid funded Endowment Fund. The project objective conceived to "To transfer the modern production technology of cereal (wheat and maize) and oilseed (sunflower and canola) crops & educate the farmers regarding the safe use of chemicals fertilizers, insecticides, herbicides, soil health and sustainability, and mitigation of adverse effects of climate change in two districts (Malakand, Swat) of Malakand Division through field days, trainings, brochures and videos. The farmers/field



assistants were trained regarding the modern production technology of different field crops cultivation

(cereal and oilseed crops etc.). In each field day/workshop farmers/field assistants from different union councils in each district (Swat and Malakand) were invited. The brochures regarding the production technologies of field crops e.g. cereals (wheat, maize, & rice) and oilseed crops (sunflower, canola & soybean) in Urdu were disseminated among the growers/field assistants in each training. Videos/presentations of important activities and the techniques used were shared with the growers during the



trainings. In district Swat and Malakand more than 500 farmers were trained in improve production technologies of field crops including Wheat, Maize, Rice, Sunflower, Canola and Soybean.

Research Projects by the Faculty during 2019-20

S.No	Title of Project	Principal Investigator	Funding Agency	Project Status	Amount
1	Phenolic compounds extraction, application on clovers to ensile for improved for age quality	Prof. Dr. M. Akmal	HEC	Completed	2.576 million
2	Enhance wheat production by grain N-enrichment through N- fertilizer management and intercropping under climate change scenario	Prof. Dr. M. Akmal	HEC	Completed	4.589 million
3	Building SOM and its impact on N-dynamics and C-budget in cereal base cropping system.	Dr. Ahmad Khan	HEC	Completed	7.6 million
4	Improving phosphorous available, use efficiency and productivity through biochar for sustainable cereal based cropping system.	Prof. Dr. M. Arif	HEC	On-going	2.6 million
5	Development of water efficient hybrid wheat for Pakistan and China	Prof. Dr. M. Arif	PSF	On-going	7.33 million
6	'Climate smart' Agriculture for steering food security by fostering cropping intensity in seasonal gaps.	Prof. Dr. M. Arif	U.S. – Pakistan Centers for Advanced Studies in Agriculture and Food Security (USPCAS-AFS) University of Agriculture, Faisalabad and University of California, Davis	Completed	3.5 million
7	Transfer of modern production technology of field days and trainings.	Prof. Dr. Amanullah Khan	Endowment Fund (UAP).	completed	1.19 million
8	"The effect of brassinosteroid and chitosan on the morphological and biochemical changes in tomato under drought stress	Dr. Imran Ahmad	HEC	On-going	1.783 million
9	Employing plant growth promoting bacteria in phytoremediation of foodborne pathogens and toxic metals from wastewater	Dr. MehboobAlam	HEC	On-going	3.816 million

S.No	Title of Project	Principal Investigator	Funding Agency	Project Status	Amount
10	Production of certified fruit	D C 1 A 1	Endowment Fund		1.52 '11'
10	plants at department of Horticulture	Dr. Gohar Ayub	(UAP)	On-going	1.52 million
11	Offseason Vegetable Production through tunnel technology	Dr Muhammad Sajid	Endowment Fund (UAP)	On-going	1.30 million
12	Molecular Based Genetics Divergence in Indigenous Common Bean of Himalaya Pakistan	Prof. Dr. Farhatullah	Agriculture Innovation Programme (AIP) of PARC, Islamabad	Completed	3.00 million
13	Evaluation and Identification of High Yielding Winter Wheat Genotypes	Prof. Dr. Iftikhar Hussain Khalil	Agriculture Innovation Program (AIP) of PARC, Islamabad	Completed	3.00 million
14	Assessment of Indigenously Developed Recombinant Inbred Lines in Rice for Commercial Cultivation in Khyber Pakhtunkhwa	Dr. Syed Mehar Ali Shah	HEC	Completed	2.63 million
15	Genetic and Molecular Appraisal of Selected Chickpea (Cicer ArietinumL.) Genotypes Against Pod Borer (Helicoverpa Armigera) at Different Locations	Dr. Rozina Gul	HEC	Completed	2.168 million
16	Establishment of Experimental Animal Laboratory using Zebrafish as Model Species	Dr. Ibrahim	HEC	Completed	0.500 million
17	Genetic Modification of Brassica juncea (Mustard) for Enhanced seed production.	Dr. Majid Khan	HEC	On-going	0.500 million
18	Analysis of Genetic Variations in Soybean grown in Pakistan using Molecular Markers	Dr. Mudassar Nawaz Khan	HEC	Completed	0.500 million
19	Unraveling the Action of Interferon-tau in the Development and Maintenance of the Bovine Corpus luteum	Dr Sher Hayat Khan	HEC	Completed	0.500 million
20	Exploring the role of retinoblastoma gene (rbr-4) in salinity stress in Arabidopsis thaliana	Dr. Muhammad Tayyab	HEC	Completed	0.500 million
21	Puccinia striiformis population Genetic Structure in Tribal	Dr. Sajid Ali	Wheat Productivity Enhancement	On-going	USD \$ 7000

S.No	Title of Project	Principal Investigator	Funding Agency	Project Status	Amount
	Districts of Pakistan and its control through wheat genetic Improvement using non- Conventional Germplasm Resources		Programme-USAID- CIMMYT		
22	Disease status of wheat yellow rust and population genetic structure of P. striiformis at its centre of diversity on European wheat germplasm	Dr. Sajid Ali	Sub-grant of EU- H2020 Project Consortium RUSTWATCH	On-going	Euro €120312
23	Surveillance and Molecular Genotyping of Wheat Rust across FATA & PATA in relation to Pakistani P. striiformis population	Dr. Sajid Ali	Agriculture Innovation Programme in Pakistan-USAID- CIMMYT	Completed	USD \$ 2,000
24	Molecular characterization of exotic and local Rice germplasm for drought tolerance under different climatic condition	Dr. Israr Ud Din	HEC	Completed	0.500 million
25	Identification of interferon stimulatory marker for early diagnosis of the pregnancy in karri sheep	Dr. Ihtesham Ul Haq	HEC	On-going	0.500 million
26	Identifying candidate gene in differentially expressed gestation lengths in different sheep breeds and climate change condition through transcript me and epigenetic analysis	Prof.Dr. Sohail Ahmad Mr. Ihtesham Ul Haq	ALP, PARC	On-going	10 million
27	Genome-wide association studies utilizing next generation sequencing to identify potential genetic selection markers for economic traits in diverse sheep populations-)	Prof. Dr. Sohail Ahmad	HEC	On-going	11.500 million
28	Establishment of National Centre for Livestock Breeding, Genetics and Genomics (NCLBGAG)	Prof. Dr. Sohail Ahmad	PSDP	On-going	31 million
29	Establishment of Incinerator in Institute Biotechnology and Genetic Engineering	Prof. Dr. Sohail Ahmad	ABM	Completed	2.500 million

S.No	Title of Project	Principal Investigator	Funding Agency	Project Status	Amount
30	Eco tilling for characterization of root systems of local rice germplasm with respect to drought stress resistance.	Dr. Afaq Ahmad Mian	НЕС	On-going	3.200 million
31	Development of prismatic solar collector for drying of fruits, vegetables, grains and feed heating	Prof. Dr. Mansoor Khan Khattak	ALP-PARC	On-going	7.230 million
32	Incidence and Characterization of viruses infecting strawberries in Pakistan	Prof. Dr Asad Ali	HEC	On-going	2.700 million
33	Efficacy of hypobaric treatment in controlling postharvest diseases in peach fruit.	Dr. Majid Hashmi	HEC	Completed	0.500 million
34	Integration of 1-MCP and hypobaric treatments to enhance the storage life of apple fruit.	Dr. Majid Hashmi	НЕС	Completed	9.200 million
35	Effect of cookies incorporated with bay leaves on postprandial glycaemia, appetite and palatability	Dr. Imran Khan	НЕС	On-going	0.41 million
36	Identification & extraction of phenolic compounds as antioxidants selected pomegranate varieties available in Peshawar fruit market	Dr. Humaira Wasila	HEC	On-going	0.40 million
37	Work Engagement and Behavioral Outcomes at Higher Educational Institutions (HIEs).	Dr. Shams Ur Rahman	HEC	Completed	0.336 million





Farmers Training in District Swat & Malakand









Farmers Training in District Swat & Malakand



Wheat Breeding Research Programme

Publication by Faculty/Researchers

Books/Chaper Published:

Department	Name of the Book	Author	Book ISBN	Publisher
	Citrus-Health Benefit and Production Technology	Prof. Dr. Muhammad Sajid Prof. Dr. Aman Ullah	Print ISBN 978-1-78985- 427-5 Ebook ISBN 978-1- 78985-428-2	Intechopen Limited, England and Wales, UK.
	Achieving Sustainable Greenhouse Cultivation	Beatrix W Alsanius, Sammar Khalil, A. Tadesse, Anna-Karin Rosberg, K. J. Bergstrand, Rahel Hartmann, Lars M Mogren, Mehboob Alam,M. Grudén, T. Naznin and A. Getahun.	9781786762801	Taylor & Francis
	Sustainable Plant Nutrition in a Changing World	Javed Nawab, Junaid Ghani, Sardar Khan, Muhammad Amjad Khan, Abid Ali, Ziaur Rahman, Mehboob Alam, Abd El- Latif Hesham and Ming Lei.	9780443186752	Springer
Horticulture	Book chapter: Mobile Apps for Human Nutrition: A Review In Book title: Mobile Devices and Smart Gadgets in Medical Sciences	Book chapter authors: Ahmad, M., M. A. Khan, M.Bibi,Z.Ullah and S.T. Shah. Book Author: S. Umair	9781799825210 (Ebook) 9781799825227 (ebook)	Springer
	Book chapter title: Microorganism: A potent biological tool to combat insects and herbivores	Book chapter authors: Shah, S.T., A. Basit, M. Sajid and H.I. Mohamed.	ISBN 978-3-030-66586-9 (hardcopy)	
	Book title: Plant growth promoting microorganisms for sustainable biotic and abiotic stress management".	Book authors: Heba I. Mohamed Hossam El-Din Saad El- Beltagi Kamel A. Abd-Elsalam	ISBN 978-3-030-66587-6 (eBook)	Springer

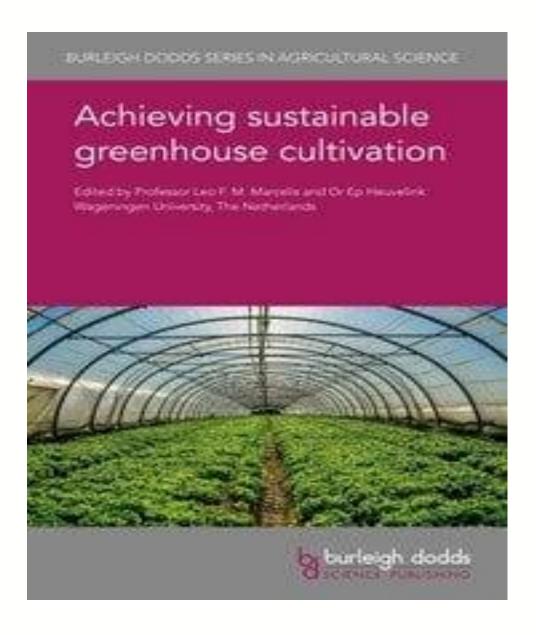
Department	Name of the Book	Author	Book ISBN	Publisher
	Book chapter title: Cyanobacteria and algae as biocontrol agents against fungal and bacterial plant pathogens	Book chapter authors: Shah, S.T., A. Basit,I.Ullah and H.I. Mohamed	ISBN 978-3-030-66586-9 (hardcover)	
	Book title: Plant growth promoting microorganisms for sustainable biotic and abiotic stress management".	Book authors: Heba I. Mohamed Hossam El-Din Saad El- Beltagi Kamel A. Abd-Elsalam	ISBN 978-3-030-66587-6 (eBook)	Springer
	Book chapter title: Plant growth promoting Rhizobacteria (PGPR) as biocontrol agents against viral protection. Book title: Plant growth promoting microorganisms for sustainable biotic and abiotic stress management".	Book chapter authors: Basit, A., S.T Shah, S.T.Muntha, H.I. Mohamed. Book authors: Heba I. Mohamed Hossam El-Din Saad El-Beltagi Kamel A. Abd-Elsalam	ISBN 978-3-030-66586-9 (hardcover) ISBN 978-3-030-66587-6 (eBook)	Springer
	Book chapter title: Microbial Bioactive Compounds produced by Endophytes (Bacteria and Fungi) and their Uses in Plant Health	Book chapter authors: Basit, A., S.T. Shah and I. Ullah, I. Ullah and H.I. Mohamed Book authors: Heba I.	ISBN 978-3-030-66586-9 (hardcover)	Springer
	Book title: Plant growth promoting microorganisms for sustainable biotic and abiotic stress management".	Mohamed Hossam El-Din Saad El- Beltagi Kamel A. Abd-Elsalam	ISBN 978-3-030-66587-6 (eBook)	
Agronomy	Plant growth regulators for climate smart	Inamullah	ISBN 9780367623456	CRC Press, Taylor & Francis Group,

Department	Name of the Book	Author	Book ISBN	Publisher
	agriculture.			
	Salt and Drought Stress Tolerance in Plants: Signaling Networks and Adaptive Mechanisms	Inamullah	ISBN 978-3-030-40276-1	Springer Nature Switzerland
	Tillage and crop production	Ahmad Khan	978-981-32-9151-5	Springer
	Chapters – 3	Shazma Anwar		
	Chapter – 17	Amanullah		FAO/Intech/CRC/Wesser
	Advances in rice research for abiotic stress tolerance (2019)	S. Fahad, M. A. Khan, I UR Rehman, Ishaq A. Mian		Woodhead Publishing
	Advances in rice research for abiotic stress tolerance (2019)	S. Fahad, M. Adnan, M. Noor, Ishaq A. Mian,		Woodhead Publishing
Soil & Environmental Sciences	Advances in rice research for abiotic stress tolerance (2019)	MA. Rahman, IA. Khan, Ullah, Ishaq A. Mian,		Woodhead Publishing
Sciences	Environment, Climate, Plant and Vegetation Growth	F. Wahid, M. Sharif, A. Ali, S. Fahad, M. Adnan, Ishaq A. Mian.		Springer
	Environment, Climate, Plant and Vegetation Growth	M. Arif, T. Jan, M. Riaz, S. Fahad, M. adnan and Ishaq A. Mian.		Springer
	Measuring Emission of Agricultural Greenhouse Gases	M Zaman, K Kleineidam, L Bakken, J Berendt, C Bracken, K. Dawar		
Plant Protection	Agronomic Crop (Chapter)	Dr. Muhammad Salim	978-981-15-0025-1	Springer
	Introduction and Application of Organic Fertilizers: Possibly Shield the Environment	F. Wahid, Muhammad Azim Khan		Cambridge Scholars Publishers, UK.
Weed Science	Cotton production and uses: Agronomy, crop protection and postharvest technologies.	M. Tariq, Muhammad Azim Khan	978-981-15-1471-5	Springer Nature, Singapore

Department	Name of the Book	Author	Book ISBN	Publisher
	Introduction and Application of Organic Fertilizers as Protectors of Our Environment. Role of Arbuscular Mycorrhizal Fungi and Biochar in Remediation of Heavy Metals.	F. Wahid, Muhammad Azim Khan	1-5275-8098-9	Cambridge Scholars Publishing
Maths, Stat & Computer Science	Resampling Techniques in Regression Analysis for Model Simplification: Model Selection Strategies LAP LAMBERT	Dr. Zafar Mahmood	978-3-659-14290-1	Academic Publishing
Rural Sociology	Knocking at Alternate Doors: Survey of Android- Based Smartphone Applications for Alternate Medicines." Mobile Devices and Smart Gadgets in Medical Sciences	Khan, R. and Shafi B.		IGI Global, 2020 22-38
ICS/IT	Mobile devices and smart gadgets in human rights	Book chapter by various faculty	9781522569398	IGI
IDS	Water profile of KP Agro ecological zones of Khyber Pakhtunkhwa	M. Zulfiqar M. Zulfiqar		
IBGE	Understanding Plant Responses to Drought and Salt Stresses: Advances and Challenges in "Omics" Approaches. In: Transgenic Crops - Emerging Trends and Future Perspectives	Mohammad Sayyar Khan Kazi and M. N. Khan Muhammad Sarwar Khan and K. A. Malik	DOI: 10.5772/intechopen.81041.	Intech Open

Department	Name of the Book	Author	Book ISBN	Publisher
	Plant Response Mechanisms to Abiotic Stresses	Shahzad Ali, Nadir Zaman, Waqar Ali, Majid Khan , Muhammad Aasim, Asmat Ali and Muhammad Usman	978-1-83969-771-5	Intech Open
	Glutathione is a Key Component in Abiotic Stress Responses. In Improving Abiotic Stress Tolerance in Plants (pp. 49-68).	Bangash, S. A. K., and K. Bela		CRC
	Glutathione peroxidases: Structural and functional characterization, their roles in plant development. Glutathione in plant growth, development and stress tolerance. 99-111.	Bela, K., S.A.K. Bangash and J. Csiszar		Springer
	Plant glutathione peroxidases: Antioxidant enzymes in plant stress responses and tolerance. Glutathione in plant growth, development and stress tolerance. 113-126.	Bela, K., S.A.K. Bangash, Riyazuddin and J. Csiszar.		Springer

Achieving Sustainable Greenhouse Cultivation
By
Dr. Mahboob Alam
Department of Horticulture
The University of Agriculture, Pehsawar

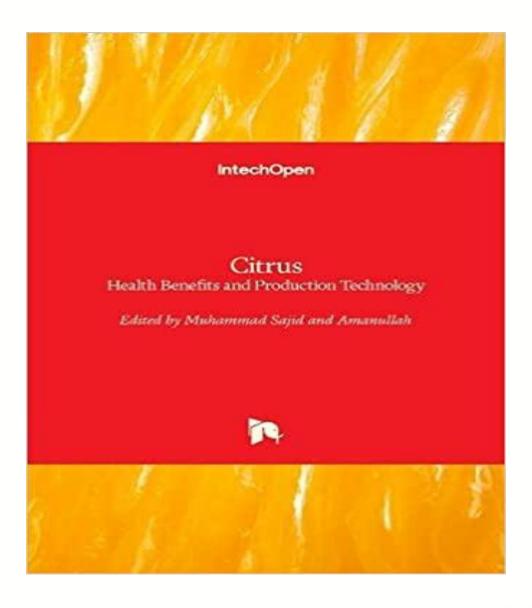


CITRUS-HEALTH BENEFIT AND PRODUCTION TECHNOLOGY

By

Prof. Dr. Muhammad Sajid Department of Horticuture

Prof Dr. Aman UllahDepartment of Agronomy
The University of Agriculture, Peshawar



Conferences and Seminars

Trainings/Conferences/Workshops Organized by Faculty & Staff during 2019-20:

S. No.	Title of the Training/ Workshop	Target Group	Number of Participants	Funding Agency
1	Biorisk Management, October 31 – November 1, 2019	Faculty, Students, Professionals	20	Association for Biorisk Management (ABM) in collaboration with Health Security Partner (HSP) and UAP
2	Novel Corona Virus Emergence, Threats and Prevention, February 27, 2020	Faculty, Students, Professionals	30	College of Veterinary Sciences, UAP.
3	Awareness session on "The Protection against women harassment at work place Act 2010" September 12, 2019	Female faculty, administrative staff and postgraduate students	50	Pak US Alumni Network, Pakistan (US Consulate, Islamabad)
4	Workshop on "Plant Tissue Culture Techniques" April 25-26, 2019	Students, scholars, researchers, educationists	35	Institute of Biotechnology & Genetic Engineering (IBGE), UAP
5	International conference on 'Strategies for ensuring food security in the changing climate' October 23 – 24, 2019	Faculty/Research Students	200	Food & Agriculture Organization (FAO)
6	Two days training on 'Classical and molecular approaches in wheat breeding' January 29-30, 2019,	Faculty/Research Students	50	Pakistan Science Foundation (PSF)
7	National conference on Beneficial Microbes and Sustainable crop Production, February 19-20, 2020.	Faculty/Research Students	150	American Society for Microbiology
8	National conference on "Sustainable Farming through Intervention of Agricultural Mechanization and Renewable Energy Technologies" June 30-July 01, 2021	Faculty/Research Students	200	Pakistan Agricultural Research Council (PARC)
9	One day workshop on "Increasing wheat production in Pakistan through disease management" – The Rust Watch Inaugural Session - European Research Council (Rust Watch Project) (October 15, 2019)	Faculty/Research Students	50 +	Institute of Biotechnology & Genetic Engineering (IBGE), UAP
10	One Day Seminar on," Post- Doctoral Fellowships Opportunities in Germany organized at IBGE funded by Homboldt Programme, Embassy of Germany	Faculty/Research Students	65	Institute of Biotechnology & Genetic Engineering (IBGE) S

S. No.	Title of the Training/ Workshop	Target Group	Number of Participants	Funding Agency
11	Assessment Report and Evaluation of Agricultural Degree Programme at HEC, Islamabad, on February 10, 2020	-	45	HEC

Participation in International/National Training Course/Seminar/Conference/Workshop/Symposia/Exhibitions (Physically/Online) during 2019-20

S. No	Title of the Conference/Seminar	Name of the Faculty/ Staff attended	Organizer/ Institution	Venue (City & Country)
1.	10 th International Animal Science Conference	Prof. Dr. Umer Sadique	Participated as Speaker	Antalya Turkey
2.	Research Methods and role of molecular biology	Prof. Dr. Umer Sadique	Jordan University of Science and Technology	Jordan
3.	International Buffalo Congress –IBC2019 February ,18-20, 2019	Dr. Hamayun Khan	University of Veterinary & Animal Sciences (UVAS)	Lahore, Pakistan
4.	4th International Conference on Agriculture, Food and Animal Sciences (ICAFAS, 2019) January 21-22, 2019	Dr. Hamayun Khan	Sind Agriculture University	Tando Jam, Pakistan
5.	AK-Institutionalizing Molecular Biology Techniques Workshop September 15-26, 2019	Prof. Dr. Umer Sadique	Biorisk Management	Irbid, Jordan
6.	Biorisk Management Curriculum Development Pakistan's National DVM Curricula April 29 – May 01, 2019	Prof Dr. Umer Sadique	Biorisk Management	Dubai, UAE
7.	Acupuncture techniques January 17, 2019	Dr. Muqadar Shah	Department of Animal Health, UAP	UAP, Peshawar
8.	Integration of ICT in Agriculture and Applied Research February 21 2019	Dr. Muqadar Shah	UAP	UAP, Peshawar
9.	Conventional and molecular diagnosis of <i>Clostridium</i> perfringens for the control of enterotoxaemia in small ruminants May2-3, 2019	Dr. Muqadar Shah	UAP	UAP, Peshawar

S. No	Title of the Conference/Seminar	Name of the Faculty/ Staff attended	Organizer/ Institution	Venue (City & Country)
10.	Maiz Silage Production and Rumen Cannulation surgery February 13-14, 2019	Dr. Muqadar Shah	Department of Animal Nutrition, UAP in collaboration with USAID	UAP, Peshawar
11.	Biorisk Management October 31-November 01, 2019	Dr. Muqadar Shah	Association for Biorisk management in collaboration with Health Security Partners and UAP	UAP, Peshawar
12.	Prevalence and control of Enterrotoxemia in small ruminants	Dr. Haq Aman Ullah	Pakistan science foundation	UAP, Peshawar
13.	Conventional and molecular diagnosis of <i>Clostridium</i> perfringens for the control of enterotoxaemia in small ruminants May 2-3, 2019	Dr. Riffatullah Khan	Dept. of Animal Health, UAP.	UAP, Peshawar
14.	Molecular diagnostic advance technologies September 15-26, 2019	Dr. Farhan Anwar Khan	Princess Haya Biotechnology Center (PHBC), Jordan University of Science and Technology (JUST)	Irbid, Jordan
15.	Biorisk Management	Dr. Farhan Anwar Khan	Association for Biorisk Management (ABM) in collaboration with Health Security Partner (HSP) and UAP	UAP, Peshawar
16.	GIST U.S Pakistan Startup Training (virtual), July 16 - August 14, 2020	Dr. Farhan Anwar Khan	HEC- Pakistan & Global Innovation through Science and Technology Initiative (GIST), United States Department of State, USA	Virtual
17.	Basic Mechanisms of Disease and Poultry Pathology" on March 2-4, 2020	Dr. Farhan Anwar Khan	Department of Pathology, University of Veterinary and Animal Sciences in collaboration with CL Davis and SW Thompson DVM Foundation, USA &	Lahore, Pakistan

S. No	Title of the Conference/Seminar	Name of the Faculty/ Staff attended	Organizer/ Institution	Venue (City & Country)
18.	Molecular diagnostic advance technologies, September 15-26, 2019	Prof. Dr. Umer Sadique Dr. Farhan Anwar Khan Dr. Sher Bahadar Khan Dr. Shakoor Ahmed	Princess Haya Biotechnology Center (PHBC), Jordan University of Science and Technology (JUST) Jordan & Sandia National Laboratories (SNL), Albuquerque, New Mexico, USA	Irbid, Jordan
19.	1st International Conference on Sustainable Agriculture: Food Security under Changing Climate Scenarios. April 3-5, 2019	Dr. Muhammad Azim Khan	Ghazi University, Dera Ghazi Khan	Dera Ghazi Khan, Pakistan
20.	National conference on "Beneficial microbes and sustainable crop production". February 19-20, 2020	Dr. Muhammad Azim Khan Dr. Muhammad Saeed	UAP	UAP, Peshawar
21.	Training of Facilitators (ToF) in the Farmer Field School (FFS) Approach June 10-21, 2019	Dr. Muhammad Saeed	UAP	UAP, Peshawar
22.	Challenges in Dry Land Agriculture in Light of Climate Change and Recommendations, December 11-12, 2019	Dr. Haroon Khan	P&D Department Govt. of KPK	Peshawar
23.	National Conference on Research and Contemporary Issues in Management, City university of science and information technology Peshawar. November 11, 2019.	Dr. Shams ur Rahman	City University of Science & Information Technology	Peshawar
24.	International Conference(online) on Issues in Management and Social Sciences, 22-23(2020)	Dr. Shams ur Rahman	Expert in Management Sciences and Social Sciences	Online
25.	5th, International online Multidisciplinary Conference on Chairing Landscape, October 23-24.2021	Dr. Shams ur Rahman	Expert in Management Sciences and Social Sciences	Online
26.	1st International Conference on Issue in Management and Social Science August 12,2020	Dr. Shams ur Rahman	Expert in Management Sciences and Social Sciences	Online

S. No	Title of the Conference/Seminar	Name of the Faculty/ Staff attended	Organizer/ Institution	Venue (City & Country)
27.	Training Facilitator in the Farmer Field School Approach, funded by FAO June 24 to July 05, 2019	Prof. Dr. Ahmad-Ur- Rahman Saljoqi		UAP, Peshawar
28.	Pesticides and Fertilizer Technician December 7-11, 2020	Prof. Dr. Shah Alam Khan	Industrial Technical Assistance Center	Ferozepur, Lahore
29.	Challenges in Dry Land Agriculture in light of Climate change and Recommendation, December 11-12, 2019	Prof. Dr. Ahmad-Ur- Rahman Saljoqi		UAP, Peshawar
30.	Nutritional Epidemiologe Worksshop (IBMS) April 8, 2019	Dr. Iftikhar ud din	UNICEF	KMU Peshawar Pakistan
31.	International Conference TROPAG November 19, 2019	Dr. Khuram Nawaz Saddozai	Queensland University Australia	Australia
32.	Climate Adaptation and Resilience	Dr. Muhammad Fayaz	World Bank	Peshawar
33.	Smart PLS3 (level 1) May 16-17, 2020,	Dr. Shams Ur Rahman	Expert in Management and Social Sciences	Online
34.	Training on Prospective of Present and Future weed Research under Climate Smart Agriculture August 17-20, 2020.	Dr. Muhammad Azim Khan	CAAST, India	Online
35.	International training on "Disaster Risk & Management" December 14-18, 2020.	Dr. Haroon Khan	Akhtar Hamid Khan National Center for Rural Development	Islamabad
36.	Session on "Tribal Women and Natural Resource Management" January 31st, 2019	Dr. Rozina Gul	Food and Agriculture Organization	Peshawar
37.	Participated in "The Power to resolve" July 12-14, 2019	Dr. Rozina Gul	US embassy Islamabad Pakistan	Islamabad, Pakistan
38.	1st training workshop for Departmental Focal Persons on "Self-assessment Report Writing and Evaluation Criteria	Dr. Sultan Akbar Jadoon	National Agriculture Education Accreditation Council (NAEC), HEC	Islamabad, Pakistan

S. No	Title of the Conference/Seminar	Name of the Faculty/ Staff attended	Organizer/ Institution	Venue (City & Country)
	of agricultural degree programs" on February 10, 2020			
39.	Webinar: ProQuest's Introduction to publishing in academic journal. December 8, 2020.	Dr. Laila Fayyaz	HEC	Islamabad, Pakistan
40.	Webinar: How to Manage your Reference Using Ref Works. December 1 st , 2020.	Dr. Laila Fayyaz	HEC	Islamabad, Pakistan
41.	The 7 ^{0th} ASEV National Conference, June 17-20, 2019.	Dr. Laila Fayyaz	Powdery Mildew Resistance Varies in Western US VitisAccessions.	Napa Valley Marriot Hotel Napa, CA, USA
42.	Plant Science Symposium, April 8, 2019.	Dr. Laila Fayyaz	University of California, Davis, USA	California, USA
43.	The Plant and Animal Genome XXVII Conference (PAG), San Diego, January 12-16, 2019.	Dr. Laila Fayyaz		San Diego, USA
44.	A three-day" International Webinar On Nutritious Maize: Technologies, Development And Availability In South Asia" July 21-23, 2020	Dr. Sultan Akbar Jadoon	Nepal Seed and Fertilizer Project and Agriculture Innovation Program (AIP) for Pakistan supported by US-AID	Online
45.	Rice Travelling Seminar	Dr Asad Jan	PARC	Pakistan
46.	CRISPR/Cas Genome Editing Technology May 2, 2019	Dr. Ibrahim	Center for Omic Sciences, Islamia College Peshawar	Peshawar
47.	Biorisk Management (Refresher course) December 19-20, 2019.	Dr. Ibrahim	Association for Biorisk Management (ABM)/IBGE	Peshawar
48.	Two days Hands on training workshop on Plant tissue culture techniques April 25-26, 2019	Dr. Majid Khan	IBGE	UAP, Peshawar
49.	Training course on classical and molecular approaches in wheat breeding" January 15-16, 2019	Dr. Majid Khan	Pakistan Science Foundation (PSF)	UAP, Peshawar
50.	One day workshop on "Integration of ICT in Agriculture and Applied	Dr. Majid Khan	UAP	UAP, Peshawar

S. No	Title of the Conference/Seminar	Name of the Faculty/ Staff attended	Organizer/ Institution	Venue (City & Country)
	Research" February 19-20, 2019			
51.	Two-days training on Biorisk management (December 19-20, 2019)	Dr. Majid Khan	Association for Biorisk Management	UAP, Peshawar
52.	Self-Assessment report writing and evaluation criteria of Agricultural degree programe	Dr. Majid Khan	HEC	Islamabad
53.	Training course on classical and molecular approaches in wheat breeding", January 15-16, 2019	Dr. Mudassar Nawaz Khan	PSF	UAP, Peshawar
54.	One-day workshop on "Integration of ICT in Agriculture and Applied Research, February 19-20, 2019	Dr. Mudassar Nawaz Khan	UAP	UAP, Peshawar.
55.	Two-days training on Biorisk Management December 19-20, 2019	Dr. Mudassar Nawaz Khan	Association for Biorisk Management,	UAP, Peshawar
56.	Training course on Classical and Molecular approaches in Wheat Breeding January 29-30, 2019	Dr. Dawood Ahmad	IBGE	UAP, Peshawar
57.	International conference on Strategies for Ensuring Food Security in the Changing Climate October 23-24, 2019)	Dr. Muhammad Tayyab	UAP	UAP, Peshawar
58.	Two days ONLINE training workshop on "Data Analysis Through Stata Software" February 26-27, 2020.	Dr. Noreen Asim	PASTIC Karachi.	Online
59.	One day Online Training workshop on "HEC Plagirism policy and effective usage of Turnitin Service" July 17, 2020.	Dr. Noreen Asim	PASTIC Karachi	Online
60.	One day ONLINE Workshop on "Make your Research Life Easier with Mendeley Tool",	Dr. Noreen Asim	PASTIC Islamabad	Online

S. No	Title of the Conference/Seminar	Name of the Faculty/ Staff attended	Organizer/ Institution	Venue (City & Country)
	September 6, 2020			
61.	One day ONLINE training workshop on "Basic Data Analysis Through "R" Software" October 29, 2020	Dr. Noreen Asim	PASTIC Karachi.	Online
62.	Two days Workshop on SPSS, held on October 24-25,2019	Dr.Noreen Asim	University of Engineering & Technology (UET)	UET, Peshawar
63.	Breeding Strategy of LS in Pakistan	Dr. Sohail Ahmad	Ministry / PARC	Islamabd
64.	Strategies for Ensuring Food Security in the Changing Climate October 23-24, 2019	Prof. Dr. Iqbal Munir	UAP	UAP, Peshawar
65.	Panel discussion on National dialogue on agri-Biotechnology for Food Security and Capacity Building of Biosafety Regulations at Comstech Islamabad, December 11-12, 2019	Prof. Dr. Iqbal Munir	COMSTECH	Islamabad
66.	Twenty-five (25) years of Excellence in Research and Innovations; Current Status and Policy Dialogue for Realization of Biotechnology as Engine for Socio-Economic Development. November 12-14, 2019	Prof. Dr. Iqbal Munir	NIBGE, Faisalabad	Faisalabad
67.	Two Days National Workshop on Beneficial Microbes & Sustainable Crop Production February 19-20, 2020	Prof. Dr. Iqbal Munir	UAP	UAP, Peshawar
68.	Strategies for Ensuring Food Security in the Changing Climate October 23-24, 2019	Dr Israr Ud Din	UAP	UAP, Peshawar
69.	39 th Pakistan congress of zoology March 4-6, 2019	Dr. Ibrahim	Zoological Society of Pakistan & Islamia College Peshawar, Pakistan	Islamia College, Peshawar
70.	3 rd National Conference on Emerging Trends in	Dr. Majid Khan	Hazara University, Mansehra	Mansehra

S. No	Title of the Conference/Seminar	Name of the Faculty/ Staff attended	Organizer/ Institution	Venue (City & Country)
	Bioinformatics and Biosciences			
71.	Strategies for Ensuring food Security in the Changing Climate	Dr. Majid Khan	UAP	UAP, Peshawar
72.	International conference on Agricultural and Biological Sciences- Focusing Food Security & Climate Change Mar 27-30, 2019.	Dr. Mudassar Nawaz Khan	The University of Haripur	Haripur
73.	National Conference on Beneficial Microbes & Sustainable Crop Production, February 19-20, 2020	Dr. Mudassar Nawaz Khan	UAP	UAP, Peshawar
74.	Annual meeting of RustWatch: A European Early-Warning System for Wheat Rust Diseases" October 5-7, 2020	Dr. Sajid Ali	Aarhus University Denmark	Online
75.	Annual Wheat Planning Meeting. September 22-23, 2020	Dr. Sajid Ali	NARC	Islamabad, Pakistan.
76.	One day workshop on "Food Security" September 17, 2020	Dr. Sajid Ali	Directorate of Science & Technology, Govt. of Khyber Pakhtunkhwa, Peshawar, Pakistan.	Peshawar
77.	National Conference on Beneficial Microbes & Sustainable Crop Production February 19-20, 2020	Dr. Sajid Ali	UAP	UAP, Peshawar
78.	Wheat Surveillance Meeting January 24, 2020	Dr. Sajid Ali	CIMMYT-NARC	Islamabad, Pakistan
79.	Annual Wheat Planning & Wheat Productivity Enhancement Program (WPEP) Annual Review October 24, 20219	Dr. Sajid Ali	CIMMYT-NARC	Islamabad, Pakistan.
80.	One Day Workshop on "Increasing Wheat Production in Pakistan through Disease Management" October 15, 2019	Dr. Sajid Ali Prof. Dr. Iqbal Munir, Prof. Dr. Safdar Hussain Shah	UAP	UAP, Peshawar

S. No	Title of the Conference/Seminar	Name of the Faculty/ Staff attended	Organizer/ Institution	Venue (City & Country)
81.	Strategies for Ensuring Food Security in The Changing Climate October 23-24, 2019	Dr. Sajid Ali	UAP	UAP, Peshawar
82.	Training Course on "The Use of Nuclear and Other Techniques in Food and Agricultural Research" October 7-18, 2019	Dr. Sajid Ali	NIFA	Peshawar, Pakistan
83.	Wheat Productivity Enhancement Programme Annual Meeting September 04, 2019	Dr. Sajid Ali	NARC	Islamabad, Pakistan
84.	National Fusarium Head Blight Forum December 8-10, 2019	Dr. Dawood Ahmad	US Wheat and Barley Scab initiative (USWBSI)	Milwaukee, Wisconsin, USA
85.	Integration of ICT in Agriculture and Applied Research February 21, 2019	Dr. Muhammad Tayyab	UAP	UAP, Peshawar
86.	CRISPR/Cas Genome Editing Technology May 02, 2019	Dr. Muhammad Tayyab	Islamia University Peshawar	Peshawar
87.	Green Spin in Biotechnology August 1-4, 2019	Dr. Muhammad Tayyab	KIBGE	Karachi
88.	Hungarian Plant Biology Congress August 24 to 27, 2021	Dr. Sajid Ali Khan Bangash	University of Szeged, Hungary	Hungary
89.	World 25 th Conference of the Parties to the United Nations Framework Convention on Climate Change December 2-14, 2019	Dr. Sajid Ali Khan Bangash	United Nation	Madrid, Spain
90.	New Phytologist Next Generation Scientists July 22-25, 2019.	Dr. Sajid Ali Khan Bangash	University College Dublin	Dublin, Ireland
91.	22 nd Australasian Plant Pathology Society Conference November 25-28, 2019	Dr. Waqas Ahmad	Australasian Plant Pathology Society (APPS)	Melbourne, Australia
92.	Awareness Session on "The Protection against Women Harassment at Workplace Act 2010" September 03, 2019	Dr. Noreen Asim		UAP, Peshawar
93.	PSHS International Horticulture Conference	Dr. Imran Ahmad	Pakistan Society for Horticultural Science	Institute of Agricultural Science, University of

S. No	Title of the Conference/Seminar	Name of the Faculty/ Staff attended	Organizer/ Institution	Venue (City & Country)
	February 26 – 28, 2020			the Punjab, Lahore
94.	PSHS International Horticulture Conference February 26 – 28, 2020	Dr. Mehboob Alam	Pakistan Society for Horticultural Science	Institute of Agricultural Science, University of the Punjab, Lahore
95.	National Conference on Beneficial Microbes and Sustainable Crop Production February 19-20, 2020	Dr. Muhammad Sajid	Department of Agronomy, UAP	UAP, Peshawar
96.	National Conference on Beneficial Microbes and Sustainable Crop Production February 19-20, 2020	Dr. Gohar Ayub	Department of Agronomy, UAP	UAP, Peshawar
97.	National Conference on Sustainable Farming through Intervention of Agricultural Mechanization and Renewable Energy Technologies June 30- July 01, 2021	Dr. Gohar Ayub	Department of Agriculture Mechanization & RET, UAP	UAP, Peshawar
98.	16 th Weed Science National Congress July 08-10, 2021	Dr. Gohar Ayub	Department of Weed Science & Botany, UAP	UAP, Peshawar



Prof. Dr. Iqbal Munir, Chair, Attended National Dialogue on Agri-Biotechnology for Food Security and Capacity Building of Biosafety Regulations at COMSTECH Islamabad, (December 11-12, 2019)



Mushroom Cultivation Training organized by Department of Plant Pathology

Training and Workshops Organized by the Faculty & Staff during 2019-20



Two Days Training on Biorisk Management organized by College of Veterinary Sciences





Farmers Training in District Swat & Malakand, organized by Department of Agronomy









Farmers Field School Training in District Swat & Malakand



Blood Donations Camp, organized by University Blood Donation Society



Prof. Dr. Aman Ullah Khan, Department of Agronomy conducted Farmers Training on Modern Production Technology of Field Crops







Transfer of Modern Production Technology of Field Crops Cultivation to Farmers in District Swat & Malakand



Transfer of Modern Production Technology of Field Crops Cultivation to Farmers in Malakand District

Research Journals

Sarhad Journal of Agriculture (Print ISSN 1016-4383; Online ISSN 2224-5383) is the official journal of the University of Agriculture, Peshawar. SJA is an open-access and peer-reviewed journal that publishes research articles on quarterly basis in every discipline of agriculture including Plant Production Sciences, Protection Sciences, Nutrition Sciences and Social Sciences. The research articles are received from national and international agricultural scientists, which are referred to highly qualified, capable and experienced subject specialists for evaluation. The journal is managed by highly qualified Editorial Board under the supervision of Chief Editor and Patron (Vice Chancellor).

SARHAD JOURNAL OF AGRICULTURE

A Quarterly Journal of The University of Agriculture, Peshawar, Pakistan

ISSN (Print) 1016-4383 (Online) 2224-5383 **PUBLISHING SINCE 1985** Vol. 35, No.03, 2019

SARHAD JOURNAL OF AGRICULTURE



Recognized by:

Higher Education Commission in "X" Category



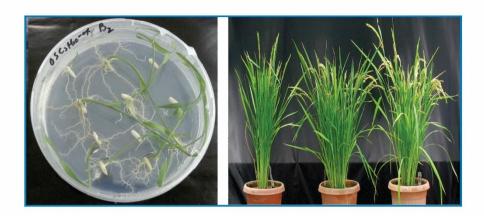


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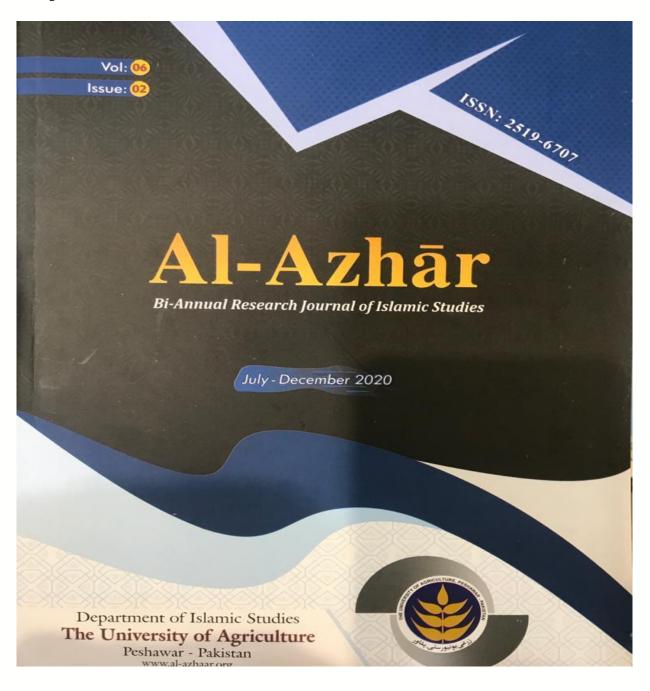
http://www.scopus.com/sources.uri



The University of Agriculture Peshawar - Pakistan
http://researcherslink.com/journal/sarhad-journal-of-agriculture



Al-Azhār having ISSN (2519-6707) is the trilingual (English, Urdu, Arabic) biannual research journal of the Department of Islamic Studies, the University of Agriculture, Peshawar which publishes papers in the field of Islamic Studies and Arabic having the features of creativeness and enquiry. However, it encourages the papers dealing with the Socio-Religious issues.



Research Collaboration/Linkages MoUJoint Research Collaboration: MoUs signed during 2019-20

S.No	Name of the University/Institute/Organization Signed MoUs with the University	
1	Petal Seed Company, Malakand Road, Sher Garh, Mardan, Khyber Pakhtunkhwa	
2	Akora Seeds Company, Akora Khattak, Khyber Pakhtunkhwa	
3	Jalendher Seed Corporation, Punjab	
4	Neelum Seed Corporation, Punjab	
5	TASCO Seed Company, Sindh	
6	Huazhong Agricultural University, Wuhan, China	
7	Sandia National Laboratories, USA	
6	University of California, Davis, USA	
7	National Institute for Food and Agriculture (NIFA), Tarnab, Peshawar	
8	Cereal Crops Research Institute (CCRI), Pirsabaq, Nowshera	
9	National Wheat Programme, NARC, Islamabad	
10	Ayub Agriculture Research Institute, Faisalabad	
11	Professor Dr. Csiszar, Department of Plant Molecular Biology Group, University of	
	Szeged, Hungary	
12	Aarhus University, Denmark	
13	University Paris-Saclay, France	
14	University, Yangling, China	
15	Cukrova University, Turkey	
16	Agri-Biotech Center, BAAFS Beijing, Republic of China	
17	Provincial Health Services Academy, Peshawar	
18	Lady Reading Hospital, Peshawar	
19	Khyber Teaching Hospital, Peshawar	
20	State Key Lab of Agricultural Microbiology, College of Veterinary Medicine,	
20	Huazhong Agricultural University, Wuhan, Republic of China	

Chapter -4

QUALITY ASSURANCE

Quality Assurance in the University

The Quality Enhancement Cell (QEC) was established in the University under the directives of Higher Education Commission (HEC) on October 16, 2006. This cell was initially established on a small scale with limited staff and basic responsibilities. However, with the passage of time, responsibilities of the QEC increased manifold. Keeping in view the importance of this section, the University's Syndicate acceded to upgrade the status of QEC to Directorate and renamed Quality Enhancement Cell as Directorate of Quality Assurance (DQA).

The Directorate of Quality Assurance is engaged in numerous indoor and outdoor activities i.e. self-assessment process, faculty and course evaluation, implementation of anti-plagiarism policy, institutional Performance Evaluation (IPE) process, facilitating in accreditation process, self IPE and postgraduate review. Currently, another task has been assigned to this Directorate that is research journals verifications and authentication.

The current officials of the DQA are as follow:

1.	Director	(Additional Charge)
2.	Additional Director	(Additional Charge)
3.	Deputy Director	(Regular)
4.	Assistant Director (02)	(Regular)
5.	Office Assistant	(Regular)
6.	Naib Qasid (02)	(Regular)

The Directorate of Quality Assurance is a well-established office of the University, headed by a Director reporting directly to the Vice Chancellor. The basic objective of the DQA is to ensure and enhance the quality of education to compete with counterparts within and across the boundaries. The DQA is responsible for planning and coordinating self-assessment activities in the University. This directorate is following the guidelines of the HEC and chalks out future plans for enhancement of quality education. The directorate is unique in the University in the sense that its performance is directly monitored by Quality Assurance Agency (QAA) of HEC on the basis of already assigned targets/criteria.

Impact of Quality Assurance in the University

With the establishment of Quality Assurance Directorate, a quality culture has been developed in the University. Most of the degree programme offered by teaching departments of the University in Agricultural and allied Sciences have been accredited by the National Agricultural Education Accreditation Council (NAEAC). The remaining programme in some departments are also on the list to be accredited by their relevant councils. Teachers' Evaluation Analysis Reports help the teachers to improve their teaching skills. Course files are prepared, maintained and improved. Importantly, strict implementation of Plagiarism Policy, research work of the scholars, students theses and internship reports are put up for plagiarism test, which help in eradicating the cut-copy-paste culture from the University up to a greater extent. The authenticity of research journals are now verified by this directorate helping faculty and students to publish their work in good quality journals rather than substandard journals.

The self-Assessment Process is a major activity of the Quality Assurance initiatives in the University. In this process each degree-awarding department/institute of the University has prepared a comprehensive report (i.e. Self-Assessment Report) for each degree programme offered. These reports are then scrutinized by the Assessment Team (Programme Evaluators) which identifies the strengths and weaknesses of the programs. Assessment Team submit their comments for improvements and suggestions for remedial of weaknesses. The departments prepare implementation plans to take corrective actions and are committed to improve their programs in future. Post graduate Programme Review is recently assigned to this directorate. Through these reviews, the implementation of minimum criteria of MS/Phil and PhD programme are verified and ensured at the University.

Membership of International Associations/Networks

The Directorate of Quality Assurance is linked with the Quality Assurance Agency of HEC, Pakistan. Moreover, the DQA has international memberships like Asia Pacific Quality Network (APQN), and the Talloires Network.

Accreditation Process

The Directorate of Quality Assurance is mandated to perform internal assessment through Self-Assessment Process to ensure Internal Quality Assurance. Similarly, external quality is ensured by Accreditation Councils. Progress on Accreditation process is mentioned below:

National Agriculture Education Accreditation Council (NAEAC) team visited the main campus of the University during November 15-17 2020 and March 25, 2021 to accredit B.Sc. (Hons) programme of the following disciplines:

- 1. Agriculture & Applied Economics
- 2. Weed Science & Botany





Accreditation Inspection Committee (AIC) of the National Agriculture Education Accreditation Council, HEC visited University

The DQA arranged the onsite visit of Accreditation Inspection Committee (AIC) of the National Agriculture Education Accreditation Council (NAEAC) on November 15-16, 2020, in order to accredit the BSc (Hons) programmes of Agriculture & Applied Economics and Weed Science & Botany.

The Accreditation Inspection Committee (AIC) of National Agriculture Education Accreditation Council visited the University of Agriculture Peshawar during November 15-17, 2020 for the accreditation of BSc (Hons) programme of the following disciplines:

- 1. Agricultural Extension Education & Communication (2nd Cycle)
- 2. Food Science Technology (2nd Cycle)
- 3. Plant Protection (2nd Cycle)

Internal MS/MPhil/M.SC (H) and PhD Programme Review Process

Quality Assurance Agency (QAA) of HEC in its 23rd meeting held during May 18-19, 2017, at Islamabad, suggested the universities to conduct Internal MS/M.Phil/M. Sc (Hons) and PhD programme review periodically. The DQA in consultation with the Directorate of Advanced Studies & Research has planned to conduct internal MS/MPhil and PhD reviews to prepare the departments regarding MS/MPhil and PhD Review before the visit to be carried out by the HEC Review team. For this purpose, the DQA has prepared evaluation checklist.



In this connection, the Internal Review committee for the Self-Post Graduate program was constituted, with the following members:

1.	Director QA	(Team Leader)
2.	Director Advance studies & Research	(Member)
3.	Additional Director QA	(Member)
4.	Deputy Director QA	(Member)
5.	Deputy Registrar S-I	(Member)
6.	Assistant Director-I QA	(Member)

The team conducted internal MPhil and PhD review visit of various departments of the University during June 07, 2021. During the visit, each Chairperson of the department delivered a brief presentation regarding MS/M.Phil/M.Sc. (Hons) and PhD programme. The Review team checked minimum criteria as per checklist of HEC.

The Review team successfully completed MPhil and PhD review visit to all departments and submitted a consolidated report to the Vice Chancellor.

Self-Institutional Performance Evaluation (IPE)

QAA of Similarly the HEC suggested the Universities in its 23rd meeting held during May 18-19, 2017 to conduct the Self IPE on annual basis. In this connection, the DOA has conducted a self IPE during June 22-23. The IPE committee reviews the University Portfolio Report (UPR) along with the evidence documents to evaluate the performance of institution against the set criteria/standards. The review panel visited various



facilities and conducted meetings with Chairpersons, administrative heads, faculty members and students group-wise. The self-IPE committee successfully completed the Institutional performance evaluation process and submitted its findings and recommendations in the form of a detailed IPE report. The composition of Self IPE committee is as under:

1.	Director Quality Assurance (QA)	Team Leader
2.	Director P&D	Member
3.	Additional Director QA	Member
4.	Deputy Director QA	Member
5.	Deputy Registrar (S-I)	Member
6.	Assistant Director QA	Member

Extending Technical Assistance and Support to the Faculty

The Directorate of QA arranges training workshops/seminars for programme teams of the Department, faculty members and post graduate students of the University regarding QAA standards, Self-Assessment process, Accreditation process, Institutional Performance Evaluation (IPE) Process and Plagiarism testing.



Trainings/Workshops/Seminars organized on Quality Assurance

The Directorate of Quality Assurance regularly organizes trainings/Workshops/Seminars on Quality Assurance and Self-Assessment Process for faculty members. The purpose of these awareness workshops is to create awareness among faculty members regarding quality standards/criteria and the means by which these criteria may be assessed and implemented. These awareness seminars sensitized importance of quality assurance in higher education.

The following trainings/workshops were arranged during reporting period: The Directorate of Quality Assurance organized one day training on "Quality. Assurance of Post Graduate Programme Review" for the focal persons of DQA from all the departments The purpose of this training was to create awareness amongst the focal persons of DQA regarding review of the postgraduate programme to ensure the quality of the Postgraduate programme and meet the minimum criteria of HEC.

The Directorate of QA arranged one day Seminar on "External Quality Assurance and Accreditation" for the newly Established Faculty of Management & Computer Sciences.

The purpose of this seminar was to create awareness amongst administration and faculty members of newly established faculty regarding how to process accreditation of their programme from concerned accreditation councils.



Online Survey System

Online Survey System developed for Teachers and Course evaluation. In this context, Focal persons from each department are selected and trained. DQA arranged a training workshop for focal persons on "Online Self- Assessment Survey System" in Video Conference Room of the University. Through this online facility, now students can freely give their feedback about teachers and courses from anywhere in free place.



Self-Assessment Reports

During the reporting period (2019-20), 04 Self-Assessment Reports were prepared as mentioned below:

- 1. B.Sc.(Hons) offered by Agriculture Extension Education & Communication. (2ndCycle)
- 2. B. Sc. (Hons) programme offered by the Department of Plant Protection. (2nd Cycle)
- 3. B. Sc. (Hons) programme offered by Food Science Technology (2nd Cycle).
- 4. B. Sc. (Hons) programme offered by the Agricultural and Applied Economics (2nd Cycle).
- 5. B. Sc. (Hons) programme offered by Weed Science and Botany (2nd Cycle)
- 6. B. Sc. (Hons) programme offered by Agronomy (3rd Cycle).
- 7. B. Sc. (Hons) programme offered by Plant Breeding and Genetics (3rd Cycle).
- 8. B. Sc. (Hons) programme offered by Soil and Environmental Sciences (3rd Cycle).

Other Accomplishments/ Activities

S.No	Date	Title
1.	Feb 10, 2020	The Deputy Director QA attended 1st training Workshop on "Self-Assessment Report Writing and Evaluation Criteria of Agricultural Degree Programme" organized by National Agricultural Education Accreditation Council (NAEAC) at HEC Islamabad.
2.	March 9, 2020	Deputy Director QA imparted a training as Resource Person on "Quality Assurance Mechanism" for faculty members of affiliated College of Malakand University, Chakdara.
3.	March 11, 2020	Director QA attended Annual Progress Review meeting of QECs at QAA, HEC, Islamabad.
4.	September 26, 2019	Teacher and Course Evaluation for Fall semester 2019 was initiated.

Chapter-5

CONVOCATION 2020

The University of Agriculture, Peshawar organized the Convocation **2020**. The Minister of Agriculture, Livestock & Cooperative and Pro-Chancellor of the University of Agricultural, Peshawar, Mr. Muhibullah Khan was the chief guest on the occasion. He said, "The scientists of the Agricultural University Peshawar must play a leadership role in the development of the agricultural economy of Khyber Pakhtunkhwa and Pakistan".



Pakistan is an agricultural country, most of the people in the villages are dependent on agriculture and livestock and the provincial government pays special attention to agriculture and livestock Sector. He said that 40 billion rupees have been spent in our province in the last 70 years on Agriculture and Livestock, while the current provincial government will spend 95 billion rupees on these fields in the next four years. While addressing as the Chief Guest in 12th Convocation, he congratulated the students, their parents and teachers and said that they are going to step into practical life with great success after receiving education and training in this institution. He said that our students will contribute to the agricultural development not only of this province but also of Pakistan. There is a rapid decline in agricultural land. He said that the experts and scientists of the University have to play a leadership role in the development of the agricultural economy of Khyber Pakhtunkhwa and Pakistan. He announced 500 million rupees for the pension endowment fund for the University. The Vice-Chancellor, Agriculture University Peshawar Prof. Dr. Jahan Bakht in his speech congratulated the students, parents

and teachers. In the convocation, 435 students were given degrees, including 82 Master and 48 PhD students. He appreciated the Pro Chancellor, Mr. Mohib Ullah Khan, Minister of Agriculture, Mr. Khaliqur Rehman, Advisor on Higher Education to Chief Minister, Dr. Muhammad Israr Khan, Secretary Agriculture, Mr. Arshad Khan, Secretary Higher Education Department, Vice Chancellors of various Universities and other guests for participating in the convocation.

















Chapter-6

PICTORIAL GLIMPSES





Group Photo of Ms Hala Rajab, PhD student of Dr. Muhammad Sayyar Khan, Institute of Biotechnology & Genetic Enginnering after successfully defending her PhD thesis entitled "Tolerance through Sulfur Metabolic Engineering and Mutualistic plant-microbe Interaction" with Supervisory Committee



Prof. Dr. Jehan Bakht, Vice Chancellor Agriculture University inaugurated Agriculture FM Radio in the Department of Agricultural Extension & Communication



Dr. Muhammad Israr Khan, Secretary Agriculture, Chairing the meeting on Khyber Pakhtunkhwa Agriculture Policy in the University





Food and Agriculture Organization of United Nation delegation visited University





Clean & Green Pakistan, Tree Plantation





MoU Signing Cermoney with the University of Engineering & Technology



MoU signing cermoney between FAO & The University of Agriculture for conducting Base line study & GIS Mapping of High Value Crop in FATA and Khyber Pakhtunkhwa



Talent Grooming Workshop under HEC, US-Aid funded Merit & Needs based Scholership Program



Prof. Dr. Iftikhar, Vice Chancellor, Gomel University D.I. Khan presented with Shield



Dr. Muhammad Israr Khan, Secretary Agriculture, Government of Khyber Pakhtunkhwa visited University



PAF Officer Training on Landscape Gardening



Chinese Deligation Vistled University



Dr. Muhammad Israr Khan, Secretary Agriculture, Government of Khyber Pakhtunkhwa visited University



 $\begin{tabular}{ll} Prof.\ Dr.\ Jehan\ Bakht,\ Vice\ Chancellor\ Group\ Photo\ with\ Agricultural\ Public\ School\ \&\ College\ position\ holder\ students \end{tabular}$





Graduation Cermoney Group photo with Prof. Dr. Jehan Bakht, Vice Chancellor





National Business Education Accreditation Council, HEC Inspection Team visited IBMS



Two Day Training Workshop organized by Animal Health

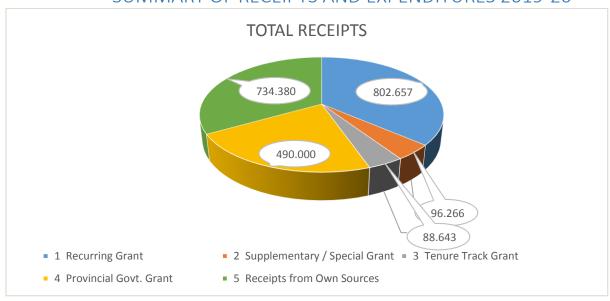


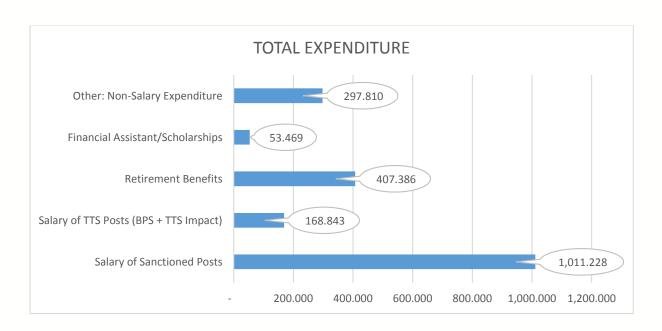
FAO & Department of Agricultural Extension & Communication jointly organized Farmer Field School

Chapter -7

FINANCE

SUMMARY OF RECEIPTS AND EXPENDITURES 2019-20





Actual Receipts and Expenditure 2019-20

	Head	2019-20 Actual (Rs Million
A)	Recurring Grant	802.657
	Supplementary/special Grant	96.266
	Tenure Track Grant	88.643
	Provincial Government Grant	490.00
	Receipt from Own Resources	734.380
	Total Receipts	2211.946
B)		
	Salary of Sanctioned posts	1011.228
	Salary of TTS Post	168.843
	Retirement Benefits	407.386
	Financial Assistance /Scholarships	53.469
	Other: Non-Salary Expenditure	297.810
	Total Expenditure	1938.736

Receipts From Own Resources

(Rupees)

Sr. No.	Head	Actual 2019-20
C02813	Education General Fees [301 - 390]	540,370,153
C0281301-6	Admission, Tuition, Registration, Exam., Library, Transcript Fee etc.	157,411,957
C0281311	Fee - Self Support Education System	322,124,469
C0281390	Other Misc. Fees (Foreign Thesis Eval. Inst. Dev., security, Renwal fee, migration, verification etc etc)	60,833,727
C02812	Hostel Fees / User Charges [201 - 226]	107,097,416
C0281201	Admission, R/Rent, Utility, Services & Bus charges	14,247,446
C0281226	Other Misc. Charges	92,849,970
C02815	Income from Services Rendered	6,000
C0281501	Income from Collaborative Research - Domestic	-
C0281536	Income from Consultancy	6,000

Sr. No.	Head	Actual 2019-20
C02818	Others [809 - 870]	86,907,173
C0281809	Affiliation Fee Received from Other Institutions	2,368,000
C0281830	Sale of Prospectus / Forms/testing services, etc	257,500
C0281840	Rent / Lease of University Buildings / Shops, etc.	17,619,267
C0281850	Income from Farm Produces / Livestock etc.	13,399,269
C0281860	Interest on Investments / Cash Balances, etc.	7,219,797
C0281870	Other Misc. Receipts (Eid Adv.,ID cards,20% staff, water charges etc)	46,043,340
	Total Own Resources	734,380,742

Sr. No.	Head	Actual 2019-20
Total Pay of F	aculty / Officers	443,727,368
A01101	Basic Pay	270,895,087
A01106	Pay of Contract Faculty/Officers	3,989,760
A0110602	Tenure Track Pay	168,842,521
Total Pay of S	taff / Others	251,435,730
A01151	Basic Pay	251,435,730
A01156	Pay of Contract Staff	-
Total Pay (Pay of Officers + Pay of Staff)		695,163,098
Total Regular	Allowances	255,369,559
A01201	Senior Post Allowance/Special Pay	3,142,862
A01202	House Rent Allowance	27,276,853
A01203	Conveyance Allowance	51,078,261
A01207	Washing Allowance	611,101
A01208	Dress Allowance	1,090,766

Sr. No.	Head	Actual 2019-20
A0124410	Adhoc.Relief Allowance 2016-10%	38,629,136
A0124411	Adhoc. Relief Allowance 2017 -10%	52,044,485
A0124412	Adhoc. Relief Allowance 2018 -10%	52,139,427
A0124413	Adhoc. Relief Allowance 2019 - 5/10%	28,858,536
A0129903	Integrated Allowance	397,908
A0129904	Gun Allowance	100,224
Other Regular	Allowances - A01211 - 70	135,362,228
A01216	Qualification/PhD/Special S&T Allowance/M. Phil Allowance	18,835,334
A01217	Medical Allowance	97,166,783
A01224	Entertainment Allowance	1,116,450
A01226	Computer Allowance	-
A01228	Orderly Allowance	15,945,119
A01238	Charge Allowance - Deanship / Chairmanship/Headship Allowance	1,932,226
A01267	Provost / Warden / Boarding Allowance	293,476
A01270	Others: (Compensation Allow/Notional increment etc.)	72,840
Total Regular	Allowances (Regular+ Others)	390,731,787
Other Allowa	nces (A01271 - 99)	94,175,376
A01271	Overtime Allowance to Drivers/Second Shift Allowance	1,518,905
A01272	Night Duty Allowance	10,500
A01273	Honorarium	814,910
A01274	Medical Charges - Hospitalization etc.	3,168,676
A01277	Contingent Paid Staff / Daily Wages	90,096,113
A0127801	Leave Salary / Pension Contribution - Deputationists	-
A0127802	Group Insurance	(1,433,728)
Total Establi	shment Charges	1,180,070,261

Non-Salary Expenditure

(Rupees)

A03101 Bank Fee 22,844 A03102 Legal Fee			(Kupees)
A03101 Bank Fee 22,844 A03102 Legal Fee	Sr. No.	Head	Actual 2019-20
A03102 Legal Fee A03103 Children Fee Subsidy 4,598,099 A032 Communication (Total) 8,451,462 A03201 Postage and Telegraph 176,643 A03202 Telephone & Trunk Calls 3,754,917 A0320401 Electronic Communication 5,825 A0320402 PERN 4,514,077 A0320403 Internet Charges	A031	Fees (Total)	4,620,939
A03103 Children Fee Subsidy 4,598,096 A032 Communication (Total) 8,451,462 A03201 Postage and Telegraph 176,643 A03202 Telephone & Trunk Calls 3,754,917 A0320401 Electronic Communication 5,823 A0320402 PERN 4,514,077 A0320403 Internet Charges	A03101	Bank Fee	22,840
A032 Communication (Total) 8,451,462 A03201 Postage and Telegraph 176,643 A03202 Telephone & Trunk Calls 3,754,917 A0320401 Electronic Communication 5,825 A0320402 PERN 4,514,077 A0320403 Internet Charges	A03102	Legal Fee	-
A03201 Postage and Telegraph 176,642 A03202 Telephone & Trunk Calls 3,754,917 A0320401 Electronic Communication 5,825 A0320402 PERN 4,514,077 A0320403 Internet Charges	A03103	Children Fee Subsidy	4,598,099
A03202 Telephone & Trunk Calls 3,754,917 A0320401 Electronic Communication 5,825 A0320402 PERN 4,514,077 A0320403 Internet Charges	A032	Communication (Total)	8,451,462
A0320401 Electronic Communication 5,825 A0320402 PERN 4,514,077 A0320403 Internet Charges	A03201	Postage and Telegraph	176,643
A0320402 PERN 4,514,077 A0320403 Internet Charges 5 A03205 Courier and Pilot Services 5 A0333 Utilities (Total) 99,670,848 A03301 Gas 13,707,675 A03302 Water 85,963,173 A03303 Electricity 85,963,173 A03340 Hot & Cold Weather Charges 107,000,851 A03402 Rent for Office Building 107,000,851 A03402 Rent for Residential Buildings (Housing subsidy/Requisition) 95,549,827 A03404 Rent for other Buildings - Hostels etc. 268,588 A03407 Rates and Taxes 268,588 A03410 Security Charges 11,182,436 A03470 Other Occupancy Cost 5 A0360 Motor Vehicles (Total) 1,134,735 A03602 Insurance 5 A03603 Registration / Token Tax 1,134,735 A0377 Consultancy & Contractual Work (Total) 11,746,584 A03801 Traning - International 11,746,584 <td>A03202</td> <td>Telephone & Trunk Calls</td> <td>3,754,917</td>	A03202	Telephone & Trunk Calls	3,754,917
A0320403 Internet Charges A03205 Courier and Pilot Services A033 Utilities (Total) 99,670,848 A03301 Gas 13,707,675 A03302 Water	A0320401	Electronic Communication	5,825
A03205 Courier and Pilot Services A033 Utilities (Total) 99,670,848 A03301 Gas 13,707,675 A03302 Water 85,963,173 A03303 Electricity 85,963,173 A0340 Hot & Cold Weather Charges 107,000,851 A0340 Occupancy Costs (Total) 107,000,851 A03402 Rent for Office Building 95,549,827 A03403 Rent for other Buildings (Housing subsidy/Requisition) 95,549,827 A03404 Rent for other Buildings - Hostels etc. 268,588 A03407 Rates and Taxes 268,588 A03410 Security Charges 11,182,436 A03470 Other Occupancy Cost 11,182,436 A0360 Motor Vehicles (Total) 1,134,735 A03602 Insurance 1,134,735 A0370 Others (Studies / Consultancies) 1,146,584 A0387 Consultancy & Contractual Work (Total) 1,1746,584 A03801 Training - Domestic 4,000 A03802 Training - International 4,0	A0320402	PERN	4,514,077
A033 Utilities (Total) 99,670,848 A03301 Gas 13,707,675 A03302 Water 85,963,173 A03303 Electricity 85,963,173 A03304 Hot & Cold Weather Charges 107,000,851 A0340 Occupancy Costs (Total) 107,000,851 A03402 Rent for Office Building 95,549,827 A03403 Rent for Residential Buildings (Housing subsidy/Requisition) 95,549,827 A03404 Rent for other Buildings - Hostels etc.	A0320403	Internet Charges	-
A03301 Gas 13,707,675 A03302 Water 85,963,173 A03303 Electricity 85,963,173 A03304 Hot & Cold Weather Charges 107,000,851 A0340 Occupancy Costs (Total) 107,000,851 A03402 Rent for Office Building 95,549,827 A03403 Rent for other Buildings (Housing subsidy/Requisition) 95,549,827 A03404 Rent for other Buildings - Hostels etc. 268,588 A03407 Rates and Taxes 268,588 A03410 Security Charges 11,182,436 A03470 Other Occupancy Cost 1,134,735 A03602 Insurance 1,134,735 A03603 Registration / Token Tax 1,134,735 A0377 Others (Studies / Consultancies) 1 A0380 Travel & Transportation [Total] 11,746,584 A03801 Training - Domestic 4,000 A03802 Training - International 1 A03805 Travelling Allowance - TA/DA 502,198 A03806 Transportation of Goods 11,188,378	A03205	Courier and Pilot Services	-
A03302 Water 85,963,173 A03303 Electricity 85,963,173 A03304 Hot & Cold Weather Charges 107,000,851 A034 Occupancy Costs (Total) 107,000,851 A03402 Rent for Office Building 95,549,827 A03403 Rent for other Buildings (Housing subsidy/Requisition) 95,549,827 A03404 Rent for other Buildings - Hostels etc. 268,588 A03407 Rates and Taxes 268,588 A03410 Security Charges 11,182,436 A03470 Other Occupancy Cost	A033	Utilities (Total)	99,670,848
A03303 Electricity 85,963,173 A03304 Hot & Cold Weather Charges 107,000,851 A034 Occupancy Costs (Total) 107,000,851 A03402 Rent for Office Building 95,549,827 A03403 Rent for Residential Buildings (Housing subsidy/Requisition) 95,549,827 A03404 Rent for other Buildings - Hostels etc.	A03301	Gas	13,707,675
A03304 Hot & Cold Weather Charges A034 Occupancy Costs (Total) 107,000,851 A03402 Rent for Office Building	A03302	Water	-
A034 Occupancy Costs (Total) 107,000,851 A03402 Rent for Office Building	A03303	Electricity	85,963,173
A03402 Rent for Office Building A03403 Rent for Residential Buildings (Housing subsidy/Requisition) 95,549,827 A03404 Rent for other Buildings - Hostels etc. 268,588 A03407 Rates and Taxes 268,588 A03410 Security Charges 11,182,436 A03470 Other Occupancy Cost	A03304	Hot & Cold Weather Charges	-
A03403 Rent for Residential Buildings (Housing subsidy/Requisition) 95,549,827 A03404 Rent for other Buildings - Hostels etc. 268,588 A03407 Rates and Taxes 268,588 A03410 Security Charges 11,182,436 A03470 Other Occupancy Cost	A034	Occupancy Costs (Total)	107,000,851
A03404 Rent for other Buildings - Hostels etc. A03407 Rates and Taxes 268,588 A03410 Security Charges 11,182,436 A03470 Other Occupancy Cost	A03402	Rent for Office Building	-
A03407 Rates and Taxes 268,588 A03410 Security Charges 11,182,436 A03470 Other Occupancy Cost	A03403	Rent for Residential Buildings (Housing subsidy/Requisition)	95,549,827
A03410 Security Charges 11,182,436 A03470 Other Occupancy Cost	A03404	Rent for other Buildings - Hostels etc.	-
A03470 Other Occupancy Cost A036 Motor Vehicles (Total) 1,134,739 A03602 Insurance	A03407	Rates and Taxes	268,588
A036 Motor Vehicles (Total) 1,134,735 A03602 Insurance	A03410	Security Charges	11,182,436
A03602 Insurance A03603 Registration / Token Tax 1,134,739 A037 Consultancy & Contractual Work (Total)	A03470	Other Occupancy Cost	-
A03603 Registration / Token Tax 1,134,739 A037 Consultancy & Contractual Work (Total)	A036	Motor Vehicles (Total)	1,134,739
A037 Consultancy & Contractual Work (Total) A03770 Others (Studies / Consultancies) A038 Travel & Transportation [Total] A03801 Training - Domestic A03802 Training - International A03805 Travelling Allowance - TA/DA A03806 Transportation of Goods A03807 P.O.L. Charges	A03602	Insurance	-
A03770 Others (Studies / Consultancies)	A03603	Registration / Token Tax	1,134,739
A038 Travel & Transportation [Total] 11,746,584 A03801 Training - Domestic 4,000 A03802 Training - International - A03805 Travelling Allowance - TA/DA 502,198 A03806 Transportation of Goods 17,000 A03807 P.O.L. Charges 11,188,378	A037	Consultancy & Contractual Work (Total)	-
A03801 Training - Domestic 4,000 A03802 Training - International - A03805 Travelling Allowance - TA/DA 502,198 A03806 Transportation of Goods 17,000 A03807 P.O.L. Charges 11,188,378	A03770	Others (Studies / Consultancies)	-
A03801 Training - Domestic 4,000 A03802 Training - International - A03805 Travelling Allowance - TA/DA 502,198 A03806 Transportation of Goods 17,000 A03807 P.O.L. Charges 11,188,378	A038	Travel & Transportation [Total]	11,746,584
A03805 Travelling Allowance - TA/DA 502,198 A03806 Transportation of Goods 17,000 A03807 P.O.L. Charges 11,188,378	A03801		4,000
A03806 Transportation of Goods 17,000 A03807 P.O.L. Charges 11,188,378	A03802	Training - International	-
A03806 Transportation of Goods 17,000 A03807 P.O.L. Charges 11,188,378			502,198
A03807 P.O.L. Charges 11,188,378			17,000
	A03807	P.O.L. Charges	11,188,378
	A03808	Conveyance Charges - for late sitting	-

Sr. No.	Head	Actual 2019-20
A03809	CNG Charges	35,008
A03810	Study Tours	-
A03820	Others	-
A039	General Operating Expenses (Total)	50,307,983
A03901	Stationery	3,288,446
A03902	Printing and Publications	333,634
A03903	Conferences / Seminars / Workshops / Symposia	2,000
A0397006	Convocation Expenses	635,206
A03904	Hire of Vehicles	-
A03905	Newspapers Periodicals and Books	130,841
A03906	Uniforms and Protective Clothing	-
A03907	Advertising & Publicity	1,113,265
A03912	Expenditure on Pakistani Delegations to Foreign Countries	-
A03913	Contribution & Subscription (CCC etc)	230,000
A03915	Payment to Govt. Department for Services Rendered	-
A03916	Essay Writing & Copyrights	-
A03917	Law Charges	3,020,760
A03918	Exhibitions Fairs & Other National Celebrations	-
A03927	Purchase of Drugs and Medicines	155,488
A03933	Service Charges	-
A03936	Foreign / Inland Training Course Fee	-
A03940	Unforeseen Expenditure / Contingencies	593,672
A03942	Cost of other stores:	-
A03959	Chemicals / Glassware	338,135
A0397002	Operational Cost- Office of Research Innovation & Commercialization (ORIC)	-
A0397003	Operational Cost of Quality Enhancement Cell (QEC)	-
A0397004	Operational Cost of Financial Aid Development Office (FAD)	-
A0397005	Conduct of Examinations	20,496,181
A0397006	Sports Activities	47,580
A0397007	Remuneration to Thesis Supervisors	2,273,000

Sr. No.	Head	Actual 2019-20
A0397008	Remuneration to Part-time Teachers / Visiting Faculty	17,649,775
A03	Total Operating Expenses	282,933,406
A04	Employees Retirement Benefits (Total)	407,386,062
A04101	Pension	296,443,780
A04102	Restoration of Commuted Value/Commutation	77,719,641
A04105	Gratuity where pension is not mature	-
A04104	Other Pension - e.g. Family Pension	-
A04106	Reimbursement of Medical Charges to Pensioners	170,150
A04110	Payment of Pension Contribution to other Organizations	-
A04114	Encashment of LPR	32,352,491
A04170	Assistance Package for Families of Employees Died in Service	700,000
A13	Repair and Maintenance (Total)	5,161,585
A13001	Transport	2,457,106
A13101	Machinery & Equipment	925,577
A13201	Furniture & Fixture	26,680
A13301	Office Buildings	879,749
A13302	Residential Buildings	693,769
A13304	Structures (Hostels, mosques etc)	143,075
A13701	Hardware	11,000
A13702	Software	-
A13703	I.T. Equipment	17,080
A13801	Maintenance of Gardens	-
A13901	Lines & Wires - Repair	-
A13920	Others - Repair	7,549
A021	Feasibility Studies	10,000
A02101	Feasibility Studies	10,000
A02102	Consultant-based Feasibility Studies	-
A022	Research Survey & Exploratory Operations (Total)	60,000
A02201	Research and Survey	60,000
A02203	Consultant Based Research & Survey	-
A061	HEC Need based Scholarships (Total)	53,469,433
A0610102	Need Based Scholarships	53,469,433
A06102	Other Scholarships	-
A06103	Cash Awards - for Meritorious Services	-

Sr. No.	Head	Actual 2019-20
A062	Technical Assistance (Total)	-
A06202	Contribution to International Agencies	-
A06270	Others	-
A063	Entertainments and Gifts (Total)	917,016
A06301	Entertainments	917,016
A06302	Gifts	-
A064	Other Transfer Payments (Total)	659,389
A0640203	Contributory Provident Fund (University Share) C.P. Fund	659,389
A0640204	Contribution / Transfers to Benevolent Fund	
A09	Expenditure on Acquiring of Physical Assets (Total)	8,039,328
A09201	Hardware (Computers, Printers etc)	332,770
A09202	Software	69,000
A09203	Purchase of I.T. Equipment	30,460
A09501	Purchase of Transport	-
A09601	Purchase of Plant & Machinery	843,260
A09701	Purchase of Furniture & Fixture	
A09801	Purchase of Livestock	
A09470	Others (Seed, Feed, Fertilizer etc)	6,629,928
A124	Civil Works - Buildings & Structures (Total)	28,630
A12405	Electrification Plumbing and Other Infrastructure	
A12470	Others - Civil Works	-
	Total Non-Salary Expenses	758,664,849

Chapter -8

UNIVERSITY LITIGATION CASES SUMMARY

The University Legal Cell of the Registrar Setup is looking after legal court cases of the University. Below is detail about the University pending cases pursued by the legal section of the University in various courts.

Pending Court Cases from 2019 to 2020

	Supreme Court of Pakistan Cases			
Year	Number of Cases			
2019	06			
2020	23			
	Total 29			
	Peshawar High Court Cases			
Year	Number of Cases			
2019	02			
2020	16			
7	Total: 18			
	District/Lower Court Cases			
Year	Number of Cases			
2019 to 2020	28			
To	otal: 28			

Supreme Court Pending Cases

S.No	Case Title	CPLA No.	Legal Counsel
1.	Uni of Agri Vs Fazli Mabood etc	CP No. 1438/2019	Mr. Naveed Akhtar
2.	Uni of Agri Vs Muhammad Shafiqetc	CP No. 2270/2019	Mr. Naveed Akhtar
3.	Uni of Agri Vs Babar Tasim	CP No. 352/2019	Mr. Khalid Khan
4.	Uni of Agri Vs Prof Dr. SubhanQurashi	CP No. 606/2019	Mr. Naveed Akhtar
5.	Uni of Agri Vs Dr.Sabeeh ullah	CP No. 4783/2019	Mr. Isa Khan
6.	Uni of Agri Vs Waqar Khattak	CP No. 4784/2019	Mr. Isa Khan
7.	Uni of Agri Vs Dr. Ihsan UllahDaur	CP No. 341/2020	Mr. Naveed Akhtar
8.	Uni of Agri Vs Noor Rehman andothers	CPLA/2020	Mr. Naveed Akhtar
9.	Uni of Agri Vs Arshid Khanothers	CPLA/2020	Mr. Naveed Akhtar
10.	Uni of Agri Vs Nadeem Iqbal andothers	CPLA/2020	Mr. Naveed Akhtar
11.	Uni of Agri Vs Shafat Ullah andothers	CPLA/2020	Mr. Naveed Akhtar
12.	Uni of Agri Vs Amjid Ali andothers	CP No. 1782/2020	Mr. Naveed Akhtar
13.	Uni of Agri Vs Irfan Ullah andothers	CP No. 1783/2020	Mr. Naveed Akhtar
14.	Uni of Agri Vs Malik Fareed	CP No. 1228/2020	Mr. Naveed Akhtar
15.	Uni of Agri Vs Fayyaz Ahmad etc	CP No. 1229/2020	Mr. Naveed Akhtar
16.	Uni of Agri Vs Wakeel Khan etc	CP No. 1230/2020	Mr. Naveed Akhtar
17.	Uni of Agri Vs Tahir Majeed etc	CP No. 1295/2020	Mr. Naveed Akhtar
18.	Uni of Agri Vs Naeem Jan etc	CP No. 1296/2020	Mr. Naveed Akhtar
19.	Uni of Agri Vs Abidullah	CP No. 1297/2020	Mr. Naveed Akhtar

S.No	Case Title	CPLA No.	Legal Counsel
20.	Uni of Agri Vs Arbab AfzalHussain & others	CP No. 1298/2020	Mr. Naveed Akhtar
21.	Uni of Agri Vs Aamir Hussain	CP No. 1555/2020	Mr. Naveed Akhtar
22.	Uni of Agri Vs Hazrat Ali andothers	CP No. 496/2020	Mr. Naveed Akhtar
23.	Uni of Agri Vs Arshad Khanothers	CP No. 1781/2020	Mr. Naveed Akhtar
24.	Uni of Agri Vs Abdul Qadeer	CPLA/2020	Mr. Naveed Akhtar
25.	Uni of Agri Vs Zeeshan Ali Shah	CPLA/2020	Mr. Naveed Akhtar
26.	UniVs Habibullah Tariq andothers	CPLA/2020	Mr. Naveed Akhtar
27.	Uni VsM. Naeem and others	CP No. 1807/2020	Mr. Naveed Akhtar
28.	Hamidullah shah Vs Uni	CPLA/2020	Mr. Naveed Akhtar
29.	Vc Uni of Agri Vs Yasir Arafat	CP No. 456/2020	Mr. Naveed Akhtar

Peshawar High Court Pending Cases

S.No	Case Title	W.P	Counsel
1.	Prof. Dr. Noor Payo Khan Vs Uni of Agri, Peshawar	4274-P/2019	Mr. Zafar TahirKheli
2.	UniVsMuhammad Amin RFA	RFA # 18-P/2020	Mr. Isa Khan &Mr. Shuaib Sultan
3.	UniVsMuhammad Riaz RFA	RFA # 19-P/2020	Mr. Isa Khan & Mr. Shuaib Sultan
4.	UniVsAyubKhan	RFA# 17-P/2020	Mr. Isa Khan
5.	UniVs Noor UlIslam and others	RFA# 245-P/2020	Mr. Isa Khan
6.	UniVsKhalid Khan & others	RFA No. 246-P/2020	Mr. Isa Khan
7.	UniVsSher Aliand others	RFA No. 247-P/2020	Mr. Isa Khan

S.No	Case Title	W.P	Counsel
8.	UniVsKhalidKhan and others	RFA# 256-P/2020	Mr. Isa Khan
9.	UniVsSher Aliand others	RFA# 251-P/2020	Mr. Isa Khan
10.	Wakeel Khan andothers	COC 776-P/2020 in W.P No.4088	Mr. NaveedAkhtar
11.	Rooh Ullah	4349-P/2020	Mr. NaveedAktar
12.	Yasir	956-P/2020	Mr. Naveed Akhtar
13.	Noor Rehman andothers	COC No. 296-P/2020 in WP No.2403	Mr. Naveed Akhtar
14.	Arshad Khan andothers	COC No. 297-P/2020 in W.P No. 3582 P/2019	Mr. NaveedAkhtar
15.	Nadeem Iqbal and others	COC No. 298-P/2020 in W.P No. 3785	Mr. Naveed Akhtar
16.	Shafat Ullah and others	COC No. 299-P/2020 in W.P No. 4335	Mr. NaveedAkhtar
17.	Sadiq Saifullah	W.P No. 4853-P/2020	
18.	Muhammad Asif Iqbal& others	COC No. 232-P/2022 in W.P No. 3716- P/2019	Mr. Naveed Akhtar

District / Lower Court Pending Cases

S.No	Case Title	Court	Counsel
1.	Ahmad Ullah and Co (Appeal)	DistrictCourt	Mr. MuhammadShakib
2.	M/S Liaqat Ullah and Co (Appeal)	Civil Court	Mr. Muhammad Shakib
3.	Waqas	Civil Court	
4.	Ali Khan	Civil Court	Mr. Zafar / Ansar
5.	Zia ul Haq and another	Civil Court	Mr. MuhammadShakib
6.	Abdullah	Civil Court	Mr. MuhammadShakib
7.	Atif Iqbal	Civil Court	Mr. MuhammadShakib
8.	Muhammad Shahbaz Khan	Civil Court	Mr. MuhammadShakib
9.	Mohibullah	Civil Court	Mr. MuhammadShakib
10.	Dalair Khan	Civil Court	Mr. MuhammadShakib
11.	Sadaqat Khan	AdditionalSession Judge	Mr. Muhammad Shakib
12.	Tahseen Ullah	Civil Court	Mr. MuhammadShakib
13.	Syed Iftikhar Hussain Shah Kazmi(Appeal)	DistrictCourt	Mr. MuhammadShakib
14.	Wajid ur Rahman and others Vs TheState and others	Magistrate	Mr. MuhammadShakib
15.	Muhammad Abdullah	AdditionalSession Judge	Mr. MuhammadShakib
16.	Mohib Ullah	AdditionalSession Judge	Mr. MuhammadShakib
17.	Touqeer	Civil Court	Mr. MuhammadShakib
18.	Azhar Farid	Civil Court	Mr. MuhammadShakib
19.	Zia ur Rehman (25)	Civil Court	Mr. Isa Khan
20.	Nimra Zahid	Civil Court	Mr. M. Shukaib

S.No	Case Title	Court	Counsel
21.	Abid Anwar	SessionCourt	Mr. Naveed Akhtar / Munir ud Din
22.	Yasir Hussain Khalil and others VsDr. Tahir Sarwar	SessionCourt	Mr. Naveed Akhtar / Munir ud Din
23.	Misbah Ullah Vs The State and Dr.Tahir Sarwar	SessionCourt	Mr. Naveed Akhtar / Munir ud Din
24.	Asad Ullah Vs Public at Large andothers	Civil Court	
25.	Wajid Ullah	Civil Court	Mr. M. Shakib
26.	Shoaib Sultan	Civil Court	Mr. M. Shukaib
27.	Fazli Mabood & others	Civil Court	Mr. M. Shukaib
28.	Babar Manzar Khali and others VsUni of Agri	Civil Court	Mr. M. Shukaib





Report Prepared by:

Directorate of Planning & DevelopmentThe University of Agriculture, Peshawar - Pakistan