

ANNUAL REPORT 2017



**PIR MEHR ALI SHAH
ARID AGRICULTURE UNIVERSITY RAWALPINDI**

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VICE CHANCELLOR'S MESSAGE

Being an Agricultural Institution, our main objective is to impart education and training to produce high quality Agricultural Scientists. Therefore, we are committed with the philosophy that we advance our farmer community by sharing positive and proven ideas and experiences. Along with Agricultural Sciences, the university offers degree programs at all levels in basic and Natural Sciences, Social Sciences, Humanities, Management Sciences, Computer Sciences and Information Technology.

The University seeks to make a major contribution to the agricultural advancement across the country. Therefore, we are dedicated to the prosecution of research across all fields of study, believing in research culture with clear application and relevance.

With a dynamic and stimulating educational environment, our tradition is to accept challenges and to receive wisdom today, in order to achieve new things and new approaches for tomorrow. Embracing education in its widest context, we continually strive to remain at the forefront of knowledge.

We are committed to prepare our students to work, acquire skills and enhance their capabilities that equip them adequately to live in rapidly changing global environment.



PROF. DR. SARWAT N. MIRZA

EXECUTIVE SUMMARY

During the year 2017, Pir Mehr Ali Shah (PMAS) Arid Agriculture University Rawalpindi has made substantial efforts to improve academic as well as research activities along with financial resources. Various teaching departments have been upgraded/ strengthened through the infrastructure development, procurement of sophisticated scientific equipments and purchase of books etc. So far 129 research projects worth Rs. 577.154 millions have been sponsored by various funding agencies i.e. HEC, PSF, PARC, & UAF.

Faculty members attended one hundred forty four national/international workshops/ seminars/ symposiums/ conferences to share/transfer knowledge in different scientific fields. The faculty members were encouraged to improve their qualification and visit universities abroad to update their technical knowledge and transfer technical know-how from international universities/institutes. During the year, faculty members of different departments of the university obtained short term trainings, doctoral/post-doctoral fellowships and executed research work in China, United Kingdom, Republic of Korea, Australia, USA, Iran, Nigeria and Nepal. The strength of the students is increasing day by day by virtue of the academic record and excellence of the university. At present more than Twelve thousand students are quenching their thirst of education from this prestigious educational organization. Presently, four hundred twenty five scholars are pursuing their Doctorates in different disciplines of Agriculture, Forestry and Biological Sciences in the university.

The linkages between faculty, Industry and farming community was further promoted/ strengthened to ensure the penetration and achievements of objectives of the university. Memorandum of Understandings (MoUs) with various national and International organizations were signed for academic and research sharing. The provision of better research facilities encouraged the faculty to publish 346 research papers in national and international reputed journals.

ABOUT THE UNIVERSITY

Pir Mehr Ali Shah Arid Agriculture University Rawalpindi (PMAS-AAUR) was established in 1994 as University of Arid Agriculture through the upgradation of Barani Agriculture College under the recommendations of Barani Commission Punjab. The mandate of the university is to produce high quality Agricultural Scientists and to form an organized scientific infrastructure for teaching and research for the development of dry land region of the country in general and Potohar in particular; thus minimizing the income gap between the rich and poor.

Since its inception, PMAS-AAUR has experienced remarkable growth and is offering undergraduate as well as post graduate degree programs in various disciplines. The University includes, Faculty of Crop and Food Sciences, Faculty of Sciences, Faculty of Social Sciences, Faculty of Forestry, Range Management & Wildlife, Faculty of Veterinary & Animal Sciences, Faculty of Agricultural Engineering & Technology, University Institute of Management Sciences (UIMS), University Institute of Information Technology (UIIT), Institute of Food & Nutritional Sciences, Institute of Geo-Information & Earth Observations and University Institute of Biochemistry & Biotechnology. The University building contains an auditorium, multi-storied administrative and academic blocks, a state of the art library and a sports gymnasium.

Pursuit of excellence on the University campus is a function of competent and dedicated university faculty. Therefore, PMAS-AAUR has made constant efforts on the staff development, resultantly more than 60% of the faculty possesses Ph.D. degrees, while the others carrying M.Phil and M.Sc. (Hons) qualifications.

Furthermore, PMAS-AAUR is committed to deliver an outstanding student experience; as well as to enjoy a reputation for excellence in teaching and learning alongside research. Students participate in extracurricular and co-curricular activities on campus which includes sports, speech events, seminars and activities related to entrepreneurial skill development. Together with a research-informed curriculum, and extracurricular activities, PMAS-AAUR strives to provide a well-diversified environment to students so that they can effectively contribute towards development of the country.

ACADEMIC ACTIVITIES

FACULTIES/INSTITUTES

FACULTY OF CROP & FOOD SCIENCES
Department of Agronomy
Department of Horticulture
Department of Entomology
Department of Plant Pathology
Department of Plant Breeding & Genetics
Department of Soil Science & SWC
Department of Agri. Extension
FACULTY OF SCIENCES
Department of Zoology/Biology
Department of Botany
Department of Biochemistry
Department of Mathematics/Statistics
FACULTY OF SOCIAL SCIENCES
Department of Sociology
Department of Anthropology
Department of Economics and Agricultural Economics
Department of Women Study Centre
Department of Humanities
FACULTY OF FORESTRY, RANGE MANAGEMENT & WILDLIFE
Department of Forestry & Range Management
Department of Environmental Sciences
Department of Wildlife Management
FACULTY OF VETERINARY & ANIMAL SCIENCES
Department of Veterinary Basic Sciences
Department of Pathobiology
Department of Clinical Studies
Department of Livestock Production and Management
Department of Poultry Sciences
FACULTY OF AGRICULTURAL ENGINEERING & TECHNOLOGY
Department of Remote Sensing and GIS
Department of Structural and Environmental Engineering
Department of Farm Machinery and Power
Department of Land and Water Conservation Engineering
Department of Horticulture Engineering
Department of Energy System Engineering
Department of Food Engineering
UNIVERSITY INSTITUTE OF MANAGEMENT SCIENCES
UNIVERSITY INSTITUTE OF INFORMATION TECHNOLOGY
INSTITUTE OF FOOD & NUTRITIONAL SCIENCES
Department of Food Technology
Department of Human Nutrition and Dietetics
Department of Food Safety and Quality Management
INSTITUTE OF GEO-INFORMATION & EARTH OBSERVATIONS
UNIVERSITY INSTITUTE OF BIOCHEMISTRY & BIOTECHNOLOGY

ACADEMIC PROGRAMS

UNDERGRADUATE PROGRAMS		
B.Sc (Hons) Agriculture	BS in Biochemistry	BS in Computer Science
B.Sc (Hons) Agri. Engineering	BS (Microbiology)	BS in Information Technology
B.Sc (Hons) Human Nutrition & Dietetics	BS in Economics	BBA (Bachelor of Business Administration)
BS Environmental Sciences	(Doctor of Veterinary Medicine) DVM	BS Software Engineering
BS in Forestry	B. Ed	BS Commerce
		BS (Remote Sensing & GIS)
POST GRADUATE PROGRAMS (M.Sc)		
Environmental Sciences	Biochemistry	MBA (1-1/2 Years)
Wildlife Management	Anthropology	MBA (3-1/2 Years)
Zoology	Criminology	MBA (Agri. Business) 1-1/2 Years
Biology	Sociology	MBA (Agri. Business) 3-1/2 Years
Botany	Economics	MDM
Mathematics	Education	MCS
Statistics	M. Ed	MIT
M.SC (HONS)		
Soil Science	Agronomy	Food Technology
Entomology	Horticulture	Human Nutrition & Dietetics
Plant Pathology	Agri. Economics	Food Safety & Quality Mgt.
Plant Breeding & Genetics	Agri. Extension	Agri. Engineering
M.PHIL/MS		
Animal Nutrition	Biochemistry	Management Sciences
Animal Breeding & Genetics	Biotechnology	Computer Science
Livestock Management	Biology	Remote Sensing & GIS
Poultry Science	Botany	Sociology
Veterinary Pathology	Zoology	Anthropology
Veterinary Microbiology	Environmental Sciences	Statistics
Veterinary Parasitology	Wildlife Management	Education
Veterinary Surgery	Forestry & Range Mgt.	Economics
Veterinary Medicine		
PhD		
Food Technology	Biotechnology	Management Sciences
Entomology	Biochemistry	Computer Science
Plant Pathology	Poultry Science	Remote Sensing & GIS
Plant Breeding & Genetics	Animal Nutrition	Agri. Engineering
Agronomy	Veterinary Pathology	Agri. Economics
Horticulture	Veterinary Parasitology	Education
Soil Science	. Veterinary Microbiology	Economics
Environmental Sciences	Veterinary Medicine & Surgery	Sociology
Forestry & Range Mgt	Livestock Management	Botany
Wildlife Management	Animal Breeding & Genetics	Zoology

ACADEMIC ACHIEVEMENTS

The university offers one hundred and four degree programmes in various disciplines of Agriculture, Agricultural Engineering, Basic & Social Sciences, Veterinary, Forestry, Range Management, Wildlife, Business Administration, Computer Sciences & Information Technology and Education. Currently the enrollment of the University is 12447 which are increasing every year. This University has so far turned out 26 Ph.D, 656 M.Phil, M.Sc (Hons.)/MS/M.Sc. and 2931 B.Sc.(Hons.)/ D.V.M/ BS/BBA/B.Ed students.

PMAS-AAUR Achieved “W” Category

PMAS-Arid Agriculture University Rawalpindi again achieved excellence in quality assurance as announced by Higher Education Commission (HEC) of Pakistan. Quality Assurance Agency (QAA) Higher Education Commission got the mandate to enhance the quality of education of all Degree Awarding Institutions (DAIs) through internal and external quality assurance mechanism.

In this regard, Internal Quality Assurance (IQA) Mechanism is implemented in all DAIs that is being assessed on annual basis by QAA, HEC through Scorecard System. The progress of implementation of IQA Mechanism for period from 2015 to 2016 of PMAS-AAUR was assessed on already defined parameters and obtained 89.89 % score. PMAS-AAUR, QEC ranked in the topmost “W” category by the HEC.

Institute of Soil Science Inaugurated at PMAS-AAUR

Realizing the importance of soil & water conservation, the Department of Soil Science & Soil and Water Conservation (SS & SWC), which was established in 1985 at Barani Agricultural College Rawalpindi, has been upgraded to the Institute of Soil Science at the main campus of PMAS-Arid Agriculture University Rawalpindi on September 26, 2017.

HONOURS AND AWARDS

Awards of the Faculty

Prof. Dr. Tariq Mukhtar, Department of Plant Pathology, Prof. Dr. Muhammad Ali Abdullah Shah, Chairman Department of Pathobiology, Dr. Shamim Akhter, Associate Professor/ Chairperson Department of Zoology/Biology have been awarded **“Research Productivity Award”** by the Pakistan Council for Science and Technology, Ministry of Science and Technology, Islamabad.

Dr. M. Sheeraz Ahmad, Assistant Professor, University Institute of Biochemistry and Biotechnology has been awarded **Distinguished Alumni Award** by Quaid-i-Azam University, Islamabad.

Dr. Munibullah, Lecturer, Department of Clinical Sciences has been awarded the status of ‘**Active Member**’ Pakistan Biological Safety Association in the year of 2017 (Membership No. 531).

INSTITUTIONAL LINKAGES

- ❖ Four Brothers Group of Companies, Lahore.
- ❖ Capital Development Authority, Islamabad.
- ❖ The Rawalpindi Chamber of Commerce & Industry.
- ❖ State Life Insurance Corporation of Pakistan.
- ❖ Agribusiness Support Fund.
- ❖ Sustainable Used Specialist Group-Central Asia (SUSG-C.ASIA), Quetta
- ❖ DELL, Pakistan.
- ❖ Water and Power Development Authority (WAPDA).
- ❖ Dairy and Rural Development Foundation.
- ❖ CAB International (CABI) Central and West Asia, Rawalpindi.
- ❖ Barani Agricultural Research Institute (BARI), Chakwal.
- ❖ Indus Consortium, Islamabad.
- ❖ MKS (Magnus Kahl Seeds), Australia.
- ❖ Rawalpindi Waste Management Company (RWMC).
- ❖ Lantix Technology (Private) Limited, Pakistan.
- ❖ M/S Tamshoon Gold, Pakistan.

RESEARCH AND DEVELOPMENT

R&D – AN OVERVIEW

The University, being the prime institute for agricultural education and research has the obligation to provide trained manpower to all sectors of agriculture in the Punjab Province. The faculty and researchers of this University have been conducting basic and applied research in the field of:



- New Technologies to Overcome Water Shortage.
- Production of Biofuels.
- Formulation of Novel Food Products.
- Promotion of High Yielding & Drought Resistance Wheat and Canola Cultivars.
- Recycling of Organic Wastes for Sustainable Crop Productivity.
- Production of Pathogen Free Horticultural Plant Nurseries.
- Soil and Water Contamination Studies.
- Biotechnology.

The university is focusing its efforts on need based research of arid agriculture in general and Potohar region in particular. A number of research projects have been completed in the past and still many research projects are being run by the faculty. Conducting research is mandatory for all students of post graduate and undergraduate levels. The faculty and researchers at the University are availing different funding opportunities for their research projects. Some are listed below:

- Higher Education Commission of Pakistan.
- Pakistan Science Foundation.
- Pakistan Agricultural Research Council (PARC).
- Punjab Agriculture Research Board (PARB).
- Endowment Fund Secretariat, University of Agriculture, Faisalabad.
- International Foundation for Science.

RESEARCH FOCUS

University faculty focused their research activities on the issues of farming community of Barani areas in general and Potohar in particular. These included projects related to soil conservation, weed management, drought tolerance studies in wheat through genetic engineering and environmental related issues. The following Research projects were operational during 2017.

- Potential application of nanotechnology in crop/vegetable growth, nutrient use efficiency, crop tissue culture and tolerance to osmotic stress.
- Optimization of Agro-management techniques for *sinapis alba*.
- Modeling rain fed cereal-based cropping systems to climatic extremes
- Evaluation of rapeseed (canola) germplasm for erucic acid content based on presence and expression of genes
- Perspective study of using weeds nano material for the management of weeds, tolerance of drought and improvement of productivity in wheat
- Characterization of soil bacteria using gene sequencing and response of cereal to associative N₂ – fixer and P-solubilizers
- Stimulation of soil biological activity through organic amendments for enhancing phosphorus availability in soil-plant system
- Inter-Comparison of CENTURY and DSSAT Model Simulations to Improve Soil Based Climate Change Resilience and Adaptability of Rainfed Crop Production Systems Pakistan
- Enhancing biological nitrogen fixation, soil water holding capacity and agronomic benefits through biochar application in dry land areas.
- Evaluation of biochar from different sources to control heavy metal toxicity to soil microorganisms and plants
- Production of pathogen free, true to type olive plants through tissue culture
- Varietal improvement of gladiolus through in vitro mutation
- Improvement of berry quality and post harvest performance of grapes cv. Parlette and King's Ruby by using food grade chemicals
- Somatic hybridization for citurs Improvement: A Way Towards a Low Input Sustainable Citrus Culture in Pakistan
- Screening of wild grape biodiversity for drought tolerance and their rootstock-scion compatibility for sustainable grape production in Pakistan
- Identifying drought tolerant synthetic wheat lines and determining their genetic diversity through DNA makers.
- Improvement of Host Disease Resistance in Tomato Through Genetic Transformation

- Development of high yielding, more sugar content and increased stay green leaf sorghum lines
- Development of high yielding wheat breeding material with improved grain iron and zinc content for rain-fed areas of Pakistan
- Development of double haploid lines of chillies resistant to phytophthora root rot
- Genetic diversity and phylotyping of *Ralstonia solanacearum* strains causing bacterial wilt of chillies in major chilli growing areas of Pakistan
- Surveillance and pathogen characterization of bacterial canker of stone fruits using biochemical and molecular methods and its bio-management
- Establishing year-round rearing facilities of bumble bees, important pollinator of commercial fruit and vegetable crops.
- Monitoring and Characterization of Insecticide Resistance in Spotted Boll Worm, *Earias vittella* (Lepidoptera: Noctuidae) Against Different Insecticides
- Value Addition of Selected Stone Fruits by Osmotic Dehydration and Hot Air Drying
- Characterization of Nutraceutical Potential of Buckwheat and value Addition of Cereal Products
- Screening for the Selection of Exopolysaccharide-Producing Strains for Yoghurt Making
- Isolation, purification and monitory analyses for production edible oil from wild olive.
- Production of butanol and ethanol from agricultural and Municipal Wastes
- Characterization of putative promoter elements in OsRGLP2 promoter region
- Identification of Genetic Risk Factors for Metabolic Syndrome in a Pakistani Population of Local Origin
- Establishment of Tissue Culture and Genetic Transformation Protocol for Local Varieties of Lentil (*Lens Culinaris* Medik)
- Screening of Cellulose Degrading Extremophilic Enzymes From Indigenous Fungi and Study of Site-Directed Mutagenesis Strategies to Enhance Their Activity
- Nutritional quality assessment and comparison of commonly consumed rainfed arid cereal varieties of Pakistan for their effective marketing and commercialization
- Population size, food Habits and Economic Importance of Commensal Rodents in Rural Pothwar
- Screening of different avian egg yolks for cryopreservation of buffalosemen: a step to improve fertility in buffaloes with frozen semen
- Biological Control of Rats and Mice in Agricultural Areas of Pothwar Barn Owl (*Tyto Alba*)
- Evaluation for Antifreeze Proteins Extracted From Various Sources for Cryopreservation of Buffalo Spermatozoa

- Exploring of genetic variation for drought tolerance in wheat by using physiological biochemical attributes
- Virulence Analyses of *Xanthomonas campestris* pv *sesami* and *Pseudomonas syringae* pv *sesami* the causal organisms of sesame (*Sesamum indicum* L) bacterial blight.
- Expression of pathogenesis - related (PR) proteins to acquire systemic resistance against fungal pathogens (*Alternaria* and *Fusarium*) of sesame
- Physio-morphic and biochemical characterization of wheat varieties in response to silver based nano- particles against heat stress
- Parental decisions on girls schooling levels within demographic framework of rural households in Pothohar Region, Punjab, Pakistan
- Drug trafficking in Pakistan: Indepth study of drug smugglers
- Baseline Studies on Wildlife Diversity in Selected Protected Areas of Pakistan (Phase-II)
- Ecologically-based Rodent Management in Crop lands of Pothwar Plateau, Pakistan
- Are Anurans Impacted by Urbanization? Anuran Monitoring and Conservation in a Human dominated Landscape
- Biotreatment of Tannery Wastewater and Its Application for Biomass Production of Energy Crops
- Collaborative Research for Genetic Conservation and Improvement of Pakistani Goats jointly funded by USAID and HEC
- Preparation and Application of Multi-Epitopes DNA Vaccines Against Newcastle Disease
- Development of Breeding Objective for Improved Milk Protein Quality of Dairy Animals

RESEARCH PROJECTS FUNDING

The PMAS-AAUR Faculty also undertook research projects in addition to teaching assignments. These projects were sponsored by different funding/donor agencies. The detail of Research Projects is given below:

S No	Name of Funding Agency	Completed	On Going	Total No of Projects	Amount (Rs. in M)
1	Higher Education Commission	22	51	73	346.893
2	Pakistan Science Foundation	11	17	28	56.417
3	Pakistan Agriculture Research Council	10	2	12	28.574
4	Punjab Agricultural Research Board	0	4	4	45.33
5	Endowment Fund UAF	4	1	5	9.783
6	Other Funding Agencies (International Foundation For Science/ World Wide Fund(WWF)/ACAIR etc..)	0	7	7	90.157
	Total	47	82	129	577.154

PUBLICATIONS

The faculty published 346 Research Publications in National and International reputed journals in 2017. (Details are given at Annexure-I)

CONFERENCES, SEMINARS AND WORKSHOPS, ETC.

Holding of Seminars, Workshops and Conferences is regular feature of the university where experts from various fields are invited to share their experiences with faculty, students & researchers on current issues of international and national importance. Such an activity is important for research and academic development of an institution as it provides guidelines for policy development at national level. During 2017, different departments of the University organized thirty three (33) International and National Workshops/ Seminars/Conferences. The

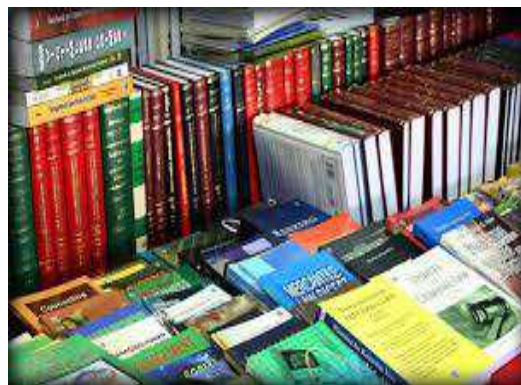


university faculty also participated and contributed research papers in Twenty one (21) International and One Hundred and Twenty Three (123) National Workshops/Seminars/Conferences (Details are given at Annexure-II)

RESEARCH JOURNALS

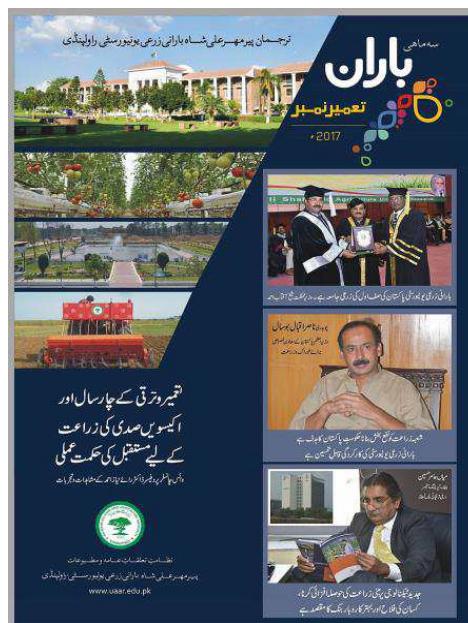
Journal of Arid Agriculture and Biotechnology (JAAB)

On the direction of worthy Vice Chancellor and the recommendation of the Academic Council of the University, a new research journal “Journal of Arid Agriculture and Biotechnology” has been launched. The aim of the journal is to publish latest research achievements and promote integration and cooperation in agriculture and allied sciences.



Quarterly Baran Magazine

The University has started publishing a quarterly “Baran” magazine under the experienced management. This initiative has been taken by the worthy Vice Chancellor for the dissemination of modern agriculture technology and information among the farming community. This magazine will also fill the gap among the policy makers, scientific community and end beneficiaries. The magazine has been distributed among the extension workers, policy makers, agricultural related authorities and progressive farmers in all over Pakistan on compliment basis. It is hope that this magazine will work as ambassador of the University with respect to the technology transfer programs.



Quarterly News Letter

In order to have a close contact with community and activities at university “Quarterly News Letter” is being published on quarterly basis. This is widely circulated among the students, faculty and all other sister organizations.

Monthly Campus News

The Campus News is being published on monthly basis to inform the students and the faculty about the ongoing and forthcoming important activities of the University. This is being circulated among the University community.



Naveed-e-Baran

This magazine is an annual publication which carries creative contribution from students and is managed by an Editorial Board mainly comprised of students.

RESEARCH COLLABORATIONS

The University has initiated collaborative projects with the following R&D organizations for the purpose of research.

- Himalayan Wildlife Foundation (HWF), Islamabad
- Punjab Wildlife & Parks Department, Lahore
- Directorate of Wildlife & Fisheries, AJ&K, Muzaffarabad
- Sustainable Use Specialist Group, Central Asia, Quetta
- Human Rights & Minorities Affairs Department. Govt. of Punjab, Lahore
- Agribusiness Support Fund
- Dairy and Rural Development Foundation
- World Wide Fund
- Pakistan Bait-ul-Maal.
- Rohicon Academy for Research & Professional Excellence, Islamabad

FOREIGN LINKAGES

The University has developed external linkages with the reputed R&D organization all over the world in order to strengthen his students and faculty. These are as follows:

- ❖ University of Florida, USA
- ❖ International Center for Agriculture Research in the Dry Areas (ICARDA), Syria
- ❖ Institute of Agro Environmental and Forest Biology & National Research Council, Italy
- ❖ Ohio State University, USA
- ❖ Curtin University of Technology, Western Australia
- ❖ Nova Scotia Agriculture College, Canada
- ❖ Hebei Agriculture University (HAU), China
- ❖ The University of Bedfordshire, U.K.
- ❖ Massey University, New Zealand
- ❖ Northwest A&F University, China
- ❖ Department of Environmental Engineering, Bio energy, Technical University of Denmark
- ❖ Management Committee of Baise National Agricultural Science and Technology Zone of Guangxi, P.R. China
- ❖ Biogas Institution of the Ministry of Agriculture (BIOMA), P.R. China
- ❖ Kyungpook National University, South Korea.

- ❖ Chinese Academy of Agricultural Mechanization Sciences (CAAMS)
- ❖ Engineering Research Center of Biological Control, Ministry of Education, College of Natural Resource and Environment, South China Agricultural University
- ❖ Selcuk University, Turkey
- ❖ Kastamonu University, Turkey
- ❖ University of Tuscia, Italy

OPERATIONS OF OFFICE OF RESEARCH, INNOVATION AND COMMERCIALIZATION (ORIC)

The Office of Research, Innovation & Commercialization (ORIC) a central staff office reporting to the Vice Chancellor, is charged with administrative responsibility for all University research and related activities involving extramural sponsorship. In fulfilling its duties, the Office of Research serves as both a center of advocacy for research and related activities, and facilitator of the research environment. The functional areas supported by Office of Research staff include information services, project and proposal development assistance, and grants and contracts administration for pre-award and selected post-award tasks. All proposals submitted by University personnel must be transmitted to and reviewed by Office of Research staff to assure adherence to internal and external policies and procedures. The Director of the Office serves as the designated University Officer for all related matters. The Office of Research, Innovation & Commercialization seeks to enhance the environment for all research and scholarships by:



- Supporting the university's strategic research directions and policies
- Increasing and diversifying external research funding
- Improving recruitment and retention of top faculty
- Improving integration of research and education at all levels of the university
- Improving translation of research into the public benefit
- Strengthening university-industry relationships
- Promoting entrepreneurship, technology-transfer and commercialization activities that energize and support the local and national economy
- Promoting and enhancing crosscutting and multi-disciplinary research initiatives

QUALITY ASSURANCE

QUALITY ENHANCEMENT CELL

Arid Varsity established Quality Enhancement Cell (QEC) in 2007 aimed to assess, monitor and assure quality of educational program and research to converge towards international compatibility using the following tools/practices:-



- Review quality standards in teaching, learning and research;
- Promote public confidence in academics and research outputs of the University;
- Develop quality assurance processes and methods of evaluation to affirm that the quality of provision and the standards of awards are being maintained; and,
- Develop procedures for monitoring, evaluation, departmental review of different degree programs, student's and employer's feedback about quality of education etc.

VISION

“To develop the Pir Mehr Ali Shah Arid Agriculture University into a Centre of Excellence by providing an outstanding educational environment with emphasis on arid/ rainfed agriculture and related professions”

MISSION

- To achieve excellence in teaching and research through continuous quality enhancement by monitoring and reviewing the progress
- To form a well-organized scientific infrastructure for teaching and high-tech research for the development of dry land regions of the country
- To produce graduates with adequate training for high professional achievements to enhance the scientific vision for the Barani areas

IMPACT OF QUALITY ASSURANCE

Quality assurance demands not only a standardized mechanism of checks and balances but it also requires an all-embracing training to understand the demands of upcoming challenges in the fields of education and research. The Quality Enhancement Cell has played a vital role in creating quality culture at the Arid Varsity. It has got implemented the quality criteria/standards designed by the Higher Education Commission of Pakistan for the quality enhancement/assurance for the HEIs.

The QEC has automated feedback system for the evaluation of faculty and courses at the end of every semester. Significant improvements in the curriculum and the quality of teaching and research have been made through Self Assessment Program in place. The weaknesses are identified and corrective actions are taken at program and department level. Awareness about the quality in education and research has also been created among the faculty and staff through training sessions. A strict monitoring of synopsis and thesis defense and implementation of anti-plagiarism policy has improved the quality of post-graduate research significantly.

Quality Enhancement Cell is striving hard to enhance the quality of education and research. The Arid University has distinction among other universities of Pakistan by recruiting all the QEC staff on regular/permanent basis. After its establishment, the QEC has made efforts for the quality enhancement of this university. A summary of salient activities/reforms is as under:-

1. UI GREEN METRIC WORLD UNIVERSITY RANKING 2016



According to the world's most renowned and prestigious ranking agency "UI Green Metric World University Ranking, Indonesia", PMAS-Arid Agriculture University Rawalpindi, ranked 2nd best University of Pakistan based on the current condition and policies related to Green Campus and Sustainability in the University.

2. MEMBERSHIPS OF INTERNATIONAL ASSOCIATIONS/NETWORKS

- Asia Pacific Quality Network (APQN)
- TUFTS University/ Talloires Network UK
- Association of Quality Assurance Agencies of the Islamic World (IQA)

3. SEMINARS/TRAINING ATTENDED BY THE QEC OFFICERS AT NATIONAL & INTERNATIONAL LEVEL

The QEC officers attended following seminars held at national level. Moreover, Director QEC attended an international training on Quality Assurance in UK.

Description	Date/Period	Venue
National level seminar on "Quality Assurance Practices in Higher Education Institutions"	May 08, 2017	University of Wah, Wah
Institutional Performance Evaluation Training at Higher Education Academy, UK	June 11-17, 2017	York, England
Video conference seminar on "Effectiveness of Institutional Performance Evaluation"	October 04, 2017	PMAS-AAUR / Indus University, Karachi
1 st International conference on Quality Assurance at Higher Education	December 18-19, 2017	Khyber Medical University, Peshawar

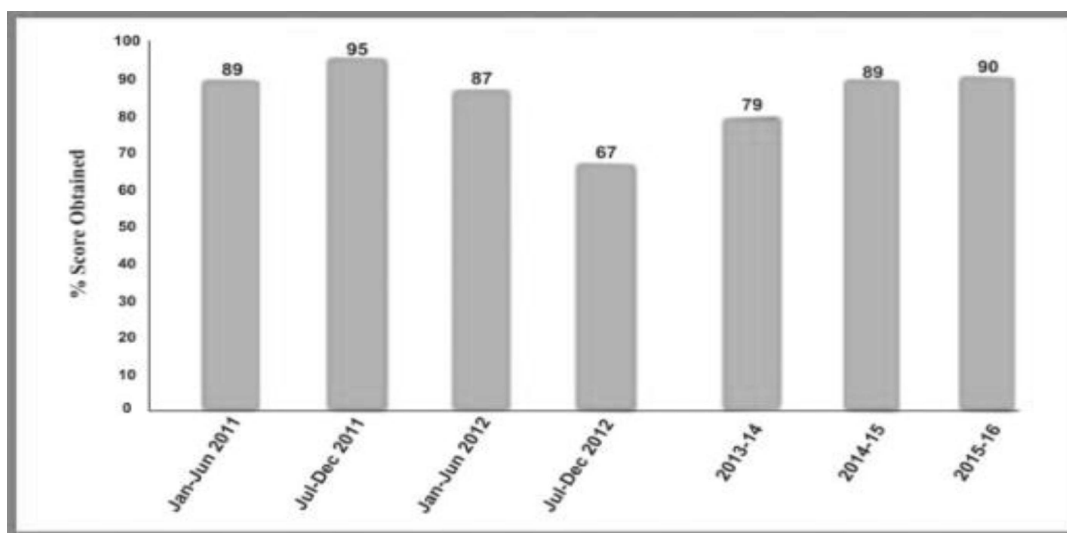


4. Paper Presentation at Khyber Medical University, Peshawar

Ms. Ainee Zafar, Assistant Registrar- QEC under the supervision of Prof. Dr Riaz Ahmad, Director Quality Control presented abstract titled “Role of Quality Assurance Practices in establishing Quality Culture at Pir Mehr Ali Shah Arid Agriculture University Rawalpindi” at 1st International Conference on Quality Assurance at Higher Education dated December 19, 2017 held at Khyber Medical University, Peshawar.

5. RANKING OF THE QEC

The Higher Education Commission of Pakistan has assessed the progress of Quality Enhancement Cells (QECs) of Pakistani Universities through quantitative/score card system on yearly basis. Based on the evaluation/progress of QEC during the specific period on certain Standards & Criteria (as per directive of HEC), QEC-AAUR achieved a total score of 90% and has been ranked in the top-most ‘W’ category (80-100%). The QAA-HEC has appreciated the contribution of QEC in ensuring Quality assurance at PMAS-AAUR. The Vice Chancellor also congratulated for their endless efforts made by QEC in enhancing the Quality of Education and research at the institution. Based on the evaluation made by the HEC, scores obtained by the QEC-AAUR during the past years are depicted below.



QUANTITATIVE ASSESSMENT OF QEC-AAUR
BY THE HIGHER EDUCATION COMMISSION OF PAKISTAN

FACULTY DEVELOPMENT

Faculty Development is a continuous phenomenon in order to achieve academic excellence. Therefore, to improve academic programs, the addition of new faculty is a regular feature at the University. The management of the University has great coherence, liaison and coordination with faculty in enhancing quality educational & research opportunities. Resultantly, PMAS-AAUR is producing useful & trained human resource in specialized sectors of Agriculture, Sciences, Information Technology, Management Sciences and Allied Disciplines. The details of regular faculty members in different faculties are as under:-

Sr. #	Name of Faculty/Institute	Lecturer	Assistant Professor	Associate Professor	Professor	Total
1.	Faculty of Crop & Food Sciences	4	27	16	13	60
2.	Faculty of Sciences	4	14	5	3	26
3.	Faculty of Social Sciences	12	8	4	2	26
4.	Faculty of Forestry, Range Management & Wildlife	5	8	1	2	16
5.	Faculty of Veterinary & Animal Sciences	17	10	6	2	35
6.	Faculty of Agricultural Engineering & Technology	4	2	0	0	6
7.	University Institute of Information Technology	10	10	0	0	20
8.	University Institute of Management Sciences	10	6	2	0	18
9.	University Institute of Biochemistry & Biotechnology	1	5	2	0	8
10.	Institute of food and Nutritional Science	3	2	1	2	8
11.	Institute of Geo information and Earth Observation	2	2	0	1	5
	Total					228

The University has been encouraging and supporting its faculty and researchers to opt for different professional development training programs both at national and international level. These programs include short term trainings and other joint research and development activities with universities and institutions. The faculty and researchers have also been facilitated for presenting their research and publications at national and international forums. The faculty members were encouraged to improve their qualifications and visit universities abroad to update their technical knowledge and transfer technical know how back home from international universities/institutes. During the year, following faculty members/ PhD students obtained doctoral/ post-doctoral fellowships and short term trainings in abroad:

POST DOCTORATE

S. #	Name of Faculty Member	Department	Name of Country
1.	Dr. Ahmad Imran, Assistant Professor	University Institute of Management Sciences	New Zealand
2.	Dr. Qaiser Hussain, Assistant Professor	Soil Science	Saudi Arabia

DOCTORATE

S. #	Name of Faculty Member	Department	Name of Country
1.	Mr. Mujeeb-ur-Rehman Sohoo, Lecturer	Histology	Pakistan
2.	Mr. Nasir Mahmood, Lecturer	Economics	Germany
3.	Mr. Mudussar Nawaz, Lecturer	Clinical Studies	Pakistan

TRAINING COURSE/SHORT TERM TRAININGS

S. #	Name of Faculty Member	Department	Name of Course/Training	Name of Country
1.	Prof. Dr. Mohammad Saleem Akhtar	Soil Science	Fellowship PIFI	China
2.	Dr. Mukhtar Ahmad, Assistant Professor	Agronomy	Workshop at National Engineering and Technology Centre for information Agriculture, Nanjing Agriculture University	China
3.	Prof. Dr. Abdul Saboor, Dean	Faculty of Social Sciences	Leadership Training Program	United Kingdom
4.	Dr. Farida Faisal, Director	University Institute of Management Sciences	UNESCO-IHES Final Water Planning Experts Workshop	Republic of Korea
5.	Dr. Aneela Afzal, Assistant Professor	Sociology	John Dillon Memorial Fellowship	Australia
6.	Prof. Dr. Riaz Ahmad, Director	Quality Control	Institutional Performance Evaluation Training	United Kingdom
7.	Mr. Mohsin Iqbal, Assistant Registrar	Controller of Examination	On Scholarship at University of Florida Under IRSIP	USA
8.	Dr. Zuhair Hasnain, Assistant Professor	Agronomy at Sub Campus Attock (on contract basis)	Workshop on Innovative Water Management	Iran
9.	Dr. Farid Asif Shaheen, Assistant Professor	Entomology	International Training Workshop on the Safe Production of Grains	China
10.	Dr. Saleem Iqbal, Assistant Professor	Computer Science	4 th International Workshop on Application of ICTs in Education, Health ware and Agriculture	Nigeria
11.	Dr. Muhammad Naveed Tahir Assistant Professor	Agronomy	International Training Workshop on Silk Road BDS Precision Agriculture	China
12.	Prof. Dr. Abdul Saboor, Dean	Faculty of Social Sciences	ICIMOD for HIMAP CLAs & Review Editors Write shop	Nepal
13.	Dr. Muhammad Hasan Ali Baig, Assistant Professor	Geo Informatics & Remote Sensing	ISPRS Workshop on Cryosphere and Hydrosphere for Global Change Studies (CHGCS 2017)	China

ACCESS

BASIC ENROLLMENT

There has been continuous increase in the student intake in various disciplines and the student enrollment increased from 7401 to 12447 in the last five years. The detail of which is given in below table:

S No	Name of Degree	2013	2014	2015	2016	2017
01	Graduates	3715	4730	6009	6626	7786
02	Post Graduates	3437	3691	4073	4093	4236
03	Doctoral	249	332	342	366	425
	Total	7401	8753	10424	11085	12447

GENDER-WISE DETAIL

SR. NO.	PROGRAM	MALE	FEMALE	TOTAL
1.	Bachelors	5544	2242	7786
2.	Masters	858	1579	2437
3.	M.Phil/MS (Hons)/MS	938	861	1799
4.	Ph.D	272	153	425
	TOTAL	7481	4819	12447

EMPLOYABILITY

In order to facilitate the graduates in job placement, Directorate of Financial Assistance & University Advancement consistently striving to develop linkages with the industry by providing the online recruiting tools either through its own resources and/or the private partners. A total of 15056 students have registered on Alumni Portal in the Year 2017 who are regularly informed about various opportunities/job openings through electronic email. Students of the Agriculture Department found jobs in different fields of government, semi-government and private sectors.

FACULTY-STUDENT RATIO

The faculty-students ratio is Approximately 1: 30.

UNIVERSITIES BUILDING ECONOMIES

UNIVERSITY-INDUSTRY LINKAGE

The University is in the process of developing linkage with the industrial / farming community. It has developed linkage with following organizations at National and International level:-

1. Barani Area Research Institute (BARI), Chakwal.
2. Fauji Fertilizer Company, Multan.
3. Alfalah Bank, Rawalpindi
4. Agency for Barani Area Development (ABAD), Rawalpindi.
5. Pakistan Council for Scientific & Industrial Research (PCSIR), Lahore.
6. Ali Akbar Group of Pesticides.
7. Syngenta Pakistan Pvt. Ltd.
8. FMC Pvt. Ltd.
9. Nestle Milk Pack Pakistan.
10. Nuclear Institute for Biotechnology & Genetic Engineering (NIBGE, FSD).
11. Arqam Foods.
12. Fauji Cereals.
13. Shezan Pak. Ltd. Hattar, Rawalpindi.
14. Vita Bread & Dawn Bread, Rawalpindi,
15. Haleeb foods & Pepsi Cola (Pvt) Ltd.

NEW INITIATIVES OF THE UNIVERSITY

PMAS-Arid Agriculture University Rawalpindi is striving hard to provide a diversified academic environment for Potohar youth looking towards joining hands with modern world for exportable surplus. University administration is endeavoring to bring about a tangible changes with a view to equip the graduates for self-employment thereby making a positive contribution in national development in addition to providing livelihood for themselves and the poor farming community of the region. The university has embarked upon new initiatives and projects tapping need oriented vision for the people of Potohar region.

State of the Art Integrated Waste Management Station

PMAS-Arid Agriculture University Rawalpindi has established a state of the art integrated Waste Management Station where modern treatment facility is based on the mechanical and biological treatment process of solid waste with proper segregation and recovery of the recyclables. This facility being not only the first one in the educational institutes but also in the country, designed and executed by Professor Dr. Rai Niaz



Ahmad, Vice Chancellor, PMAS-AAUR. The key features of this recently developed station are to transform decomposable waste in to compost for organic agriculture and bio-gas which can provide safe and healthy food to the community. Additionally, this solid waste if handled properly would maintain the natural balance of essential elements and thereby promote more harvest from nature. PMAS-AAUR and Rawalpindi Waste Management Company (RWMC) also signed MoU with an aim to clean environment and obtain energy from solid waste/biomass on the lines of developed model at PMAS-AAUR.

University Research Products Display Centre

University Research Product Display Centre (URPDC) is the visionary project initiated on June 17th 2015 by the Worthy Vice Chancellor, Prof. Dr. Rai Niaz Ahmad. Later on it was given under the administrative control of Office of Research, Innovation & Commercialization (ORIC). The aim of the project is to facilitate and promote the research activities of the University students and researchers in the field of Agriculture, Agri.



Engineering, Livestock, Poultry, Food Technology and Business & Marketing. Along with the facilitation of research, URPDC is also handed over with the responsibility to train the students with the entrepreneurial skills, in addition to sale and display the university research produce to the community at fair prices.

Presently a wide variety of baked items, processed fruit & vegetable products, poultry meat & eggs, fish meat, veal meat, milk and other university products are exclusively available for sale at URPDC.

Establishment of Nursery Training Project

A plant nursery comprising of various indigenous and exotics species was established at the main campus of the University. The main objective of establishing this facility is to strengthen the practical facilities of the undergraduate and postgraduate students. Beside thus plants of various species will be sold at cheaper rates to the public in order to enhance their aesthetic sense as well as to curb the menace of pollution.



Establishment of Clean Drinking Water Facility

With increase in population in the country, the demand for clean drinking water has increased significantly. However due to burgeoning environmental pollution people are being confronted with many water borne diseases and the problem is increasing day by day. The present Government is determined to provide such basic common facilities to common people for better tomorrow and bright, healthy future. Keeping above in view, the university established the clean drinking water facility for the students and staff of the University.

Establishment of Community Center

The purpose for establishment of community center is to showcase the farm fresh university products for the consumption of university employees, students and public. This will also act as source of revenue for the university as well as learning for the students.

Establishment of Ostrich Research Farm

Ostrich, a rare bird having extraordinary potential for conversion of food into meat, is being raised at the university as a model for the Potohar farmers to adopt. Its meat is being sold at a very high price in international market and therefore, provides ample opportunity for the farmers of the region to improve their livelihood through raising Ostrich at their farms.



Rain Water Harvesting Model for Small Farmers

Taking advantage of the short spell of monsoon rains, the University has converted its research area into a model farm with provision for collecting summer rains into small reservoirs through which the water saved amounts to 45 acre-foot which is sufficient for irrigation of its entire farm spreading over 250 acres using high efficiency irrigation system operated through solar energy. Similarly, for urban areas a rainwater harvesting model of rooftops of university campus has also been developed and the water stored is enough to



irrigate experimental plots on acreage at the campus. This effort presents an excellent model for kitchen gardening through rainwater harvesting in urban areas besides minimizing street flooding and resulting discomforts in civic life during the rainy season.

Aquarium-cum-Aviary

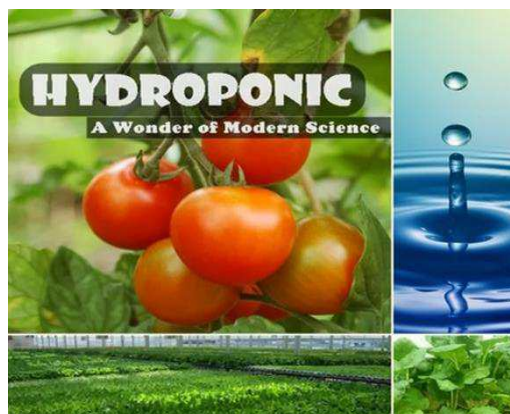
The Arid varsity presents a novel combination of Aquarium-cum-Aviary as a model for integrated farming where the waste of birds on top will be used as feed for fish in pond at the bottom. The model is an effort towards resource optimization at farm level for dissemination to the farming community of the area.



Low Cost Indigenous Hydroponics System

PMAS-Arid Agriculture University is successfully operating a state-of-the-art hydroponic vegetable production facility on commercial basis where certified, spray and disease free vegetables, salads and herbs are being grown and marketed inland and off shore. To lessen the input costs and make adaptable by the small farmers, the university faculty is engaged in development of simplified and low cost hydroponics technology. Objectives of this effort also include provision of inputs such as nursery, nutrients and growing substrates by the University at minimum cost for popularization of the technology at masses level.

In addition to above, the University erected the twelve (12) Hydroponic Units (each on 02 Kanals) at various locations of District Punjab through ADP funded project titled “Testing Indigenous Hydroponic Greenhouses for Vegetable Growing at Various Locations in Punjab” amounting to Rs. 77.571 million.



PATENTS

The faculty of the University is doing exclusive research and succeeded in applying the patents for the outcomes of their research activities which are beneficial for the local farming community in order to increase the Agriculture and Livestock production in the Barani areas of the region.

S #	Product Name	Ingredients	Effects/Benefits
1.	A poly herbal composition for cooling, refrigerant, antioxidant and appetizer By Prof. Dr. Azra Khanum	Cichorium intybus, Foeniculum vulgare, Corchorus depressus, Citrullus lanatus, Cucumis melo and C. sativus	Cooling, diuretic and refrigerant tonic that can be used for treating jaundice, lack of appetite and burning sensation of palm and soles
2.	Six Transgenic Wheat varieties with Bacterial disease resistant genes By Prof. Dr. Kausar Nawaz Shah	Six Wheat varieties viz. Chakwal-97, Inqulab-91, GA-2002, Aquab-2002, Tartara-2000 and Punjnad-2000 with Xa21 gene (a gene produce inhibitor like protein that act as broad spectrum Anti-bacterial protein)	Although bacterial diseases are less destructive for wheat in Pakistan as compare to fungal diseases. But this product and procedure will help in production of Fungal disease resistant wheat in future (project under progress). Similarly, these transgenic wheat varieties can enhance yield up to 20% where bacterial diseases cause a significant loss in wheat yield.
3	Integrated solid waste management system By Prof. Dr. Rai Niaz Ahmad	Machine consists of outer cylinder, inner cylinder, pressure gauge, boiler, food hopper, food outlet, water inlet, water outlet, solid waste feeder, digester, catalyst shower, moisture meter, drainage pipe, gas extraction pipe	Production of poultry feed, biogas and valuable compost for organic gardening.
4	Indigenous hydroponic system By Prof. Dr. Rai Niaz Ahmad	Unit consists of green shed, cooling/ heating system, drip irrigation, fertigation system, drainage and detectors for different controlled parameters	Production of quality vegetables likes tomatoes, cherry tomatoes, pepper, cucumber etc with pesticide residue free and high shelf life, several fold production and affordable to local farming community to produce out of season crops.
5	Water seed drill By Prof. Dr. Rai Niaz Ahmad	Main frame, water tank, water distribution pipes, water nozzles and control valve.	Provision of water to soil at the time of seed sowing in order to facilitate seed germination under moisture stress conditions.

INTERNSHIP AND PLACEMENT OFFICE

Vertical and horizontal expansion of academic programs, subsequent increased gross enrollment and tangible improvement in academic and research standards necessitated a dedicated entity in the form of University Placement Bureau (UPB, Estd. in 2006) to facilitate the students/graduates in attainment of scholarships, internships and jobs. In 2009, Higher Education Commission of Pakistan also took this three pronged policy in hand and desired public and private universities to establish their resource and consultation centers for graduates' welfare and university advancement. Thus, UPB was renamed as Students Resource Centre (SRC) in 2009, to pave the linkage between the graduates, prospective employers and scholarship benefactor agencies. Prompt dissemination of information regarding jobs, scholarships, skill enhancement training facilities, workshops, seminars, events/activities at the campus etc. to the registered graduates through electronic mail is the regular feature of Students Resource Centre.

The University has revamped this chapter and transformed in to Directorate of Financial Assistance & University Advancement in 2014. Directorate of Financial Assistance and University Advancement is a focal point for all types of internal and external scholarships availed by the students of University. The centre strives to ensure the transparency in award of scholarships right from collection of applications to disbursement of funds. Directorate of Financial Assistance and University Advancement also facilitates various entities offering scholarships independently in verification and performance appraisal of their scholars at University.

ACTIVITIES OF DIRECTORATE

Different scholarships offered by the Directorate are as follows:

S. No	Name of Scholarship	Scholarship Eligibility Criteria
1	Shahbaz Sharif Merit Scholarship	Offered for postgraduate students having any domicile
2	PEEF (Punjab Educational Endowment Fund)	Offered for undergraduate/postgraduate students having Punjab domicile
3	USAID Funded Merit & Need Based Scholarship Program	Offered for undergraduate/postgraduate agriculture/veterinary students
4	Vice Chancellor Talent Scholarship	Offered at subject/discipline level in each semester
5	HEC Need Based Scholarship	Offered for all degree programs
6	Pakistan Bait-ul-Maal Scholarship Program	Offered for the deserving students of university
7	Pakistan Scottish Scholarship Scheme	Offered for only female students
8	Diya Pakistan Scholarship	Offered for needy students
9	Directorate of Agriculture Extension FATA Scholarship	Offered for students admitted on FATA domicile
10	PM Tuition Fee Reimbursement	Offered for Post Graduate Students

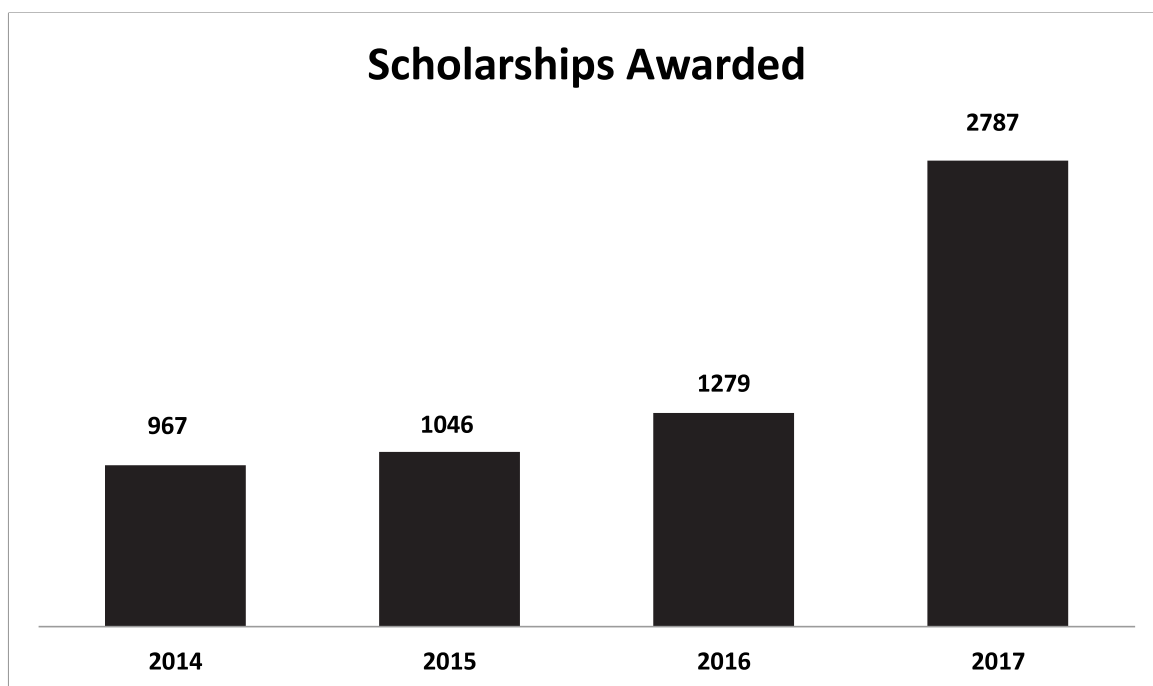
SUMMARY OF SCHOLARSHIPS:

A total of 2787 scholarships have been awarded to the university students in 2017. Following is the detail of scholarship programs during year 2017:

Scholarship Details for the Year 2017		
S. No.	Name of Scholarship	Scholarships Awarded
1.	PEEF (Punjab Educational Endowment Fund)	1118
2.	HEC Need Based Scholarship	593
3.	USAID Funded Merit & Need Based Scholarship Program	68
4.	Vice Chancellor Talent Scholarship	558
5.	Pakistan Bait-ul-Maal Scholarship Program	100
6.	Pakistan Scottish Scholarship Scheme	03
7.	Diya Pakistan Scholarship	03
8.	Directorate of Agriculture Extension FATA Scholarship	45
9.	Shahbaz Sharif Merit Scholarship	106
10.	PM Tuition Fee Reimbursement	193
	Total	2787

GRAPHICAL COMPARISON OF SCHOLARSHIPS FROM 2014-2017

Years	2014	2015	2016	2017
Scholarships Awarded	967	1046	1279	2787



PRIME MINISTER'S LAPTOP SCHEME:

Prime Minister's Laptop scheme has also been dealt by this Directorate. A total of 1442 laptops have been distributed to the talented students of the University, who were selected by HEC, Islamabad on merit from various disciplines/departments of PMAS-AAUR.

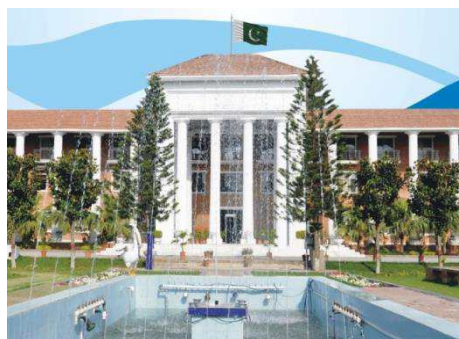
ALUMINI REGISTRATION:

This directorate also deals with alumni Registration. A total 15056 students have done their registrations on web portal.

STRENGTHENING PHYSICAL INFRASTRUCTURE

DEVELOPMENT PROJECTS (LABORATORIES, LIBRARIES, ETC.)

Developmental projects play very important role in uplifting and growth of an institution. The University is continuously taking initiatives for improvement the current status through different development projects. Twenty two development projects have already been completed. Currently the University is implementing three such projects (Rs. 1708.483 millions) while seven new proposals were also submitted to HEC and Punjab Government in next year. The University carried out various plans, formulated strategies & putting in strenuous efforts to enhance the financial resources from avenues outside PMAS-AAUR. Funds were also fetched from the Higher Education Commission of Pakistan and Government of the Punjab under different schemes for establishing/strengthening new departments at PMAS-AAUR. These efforts will create more research facilities for the students and the faculty members.



The funds amounting to Rs. 879.668 millions have been fetched from Government of the Punjab for the project titled **“Establishment of Sub Campus of PMAS-Arid Agriculture University at Attock (Phase-II)”**.

Another project titled **“Testing Indigenous Hydroponic Greenhouses for Vegetable Growing at Various Locations in Punjab”** amounting to Rs. 77.571 millions has also been approved by the Agriculture Department, Government of the Punjab, Lahore.



Development Projects : i) COMPLETED

Name of the Project	Total Cost Rs. in millions
Development of Academic Facilities at UAAR	49.740
Establishment of Centre for Information Technology	27.961
Strengthening of Higher Education Facilities at UAAR	39.645
Establishment of Centralized Instrumentation Centre	37.108
Establishment of Department of Range Management & Forestry	35.972
Establishment of Fiber Optic Backbone & Campus Wide Local Area Network	25.300
Production of Pathogen Free Horticultural Plants	35.884
Construction of Hostel for Visiting Faculty	24.438
Construction of Hostel for Students	36.436
Strengthening of Department of Soil Science & SWC	33.580
Strengthening of Centre for Information Technology	34.346
Strengthening of Department of PBG	31.783
Strengthening of Sports Facilities at UAAR	38.885
Strengthening of Department of Entomology	34.783
Establishment of R&D Facility in Hydroponic	52.546
Strengthening of Department of Wildlife Management	36.141
Strengthening/ Up gradation of Library Facilities at PMAS-AAUR	41.021
Establishment of University Institute of Biochemistry & Biotechnology	358.619
Establishment of Faculty of Veterinary & Animal Sciences	468.620
Development On Farm Students Research Facilities	343.224
The Establishment of Pak-Korea Capacity Building Center for Agriculture & Livestock Technology at PMAS-AAUR	395.500
Establishment of Sub Campus of PMAS-Arid Agriculture University Rawalpindi at Attock	188.260
Total (Rs. in millions)	2369.792

ii) ONGOING

Development Projects (On-Going)	Cost (million Rs.)
Strengthening of Agricultural Engineering & Women Development Programs at PMAS-AAUR	751.244
Testing Indigenous Hydroponic Greenhouses for Vegetable Growing at Various Locations in Punjab	77.571
Establishment of Sub Campus of PMAS-Arid Agriculture University at Attock (Phase-II)	879.668
Total (Rs. in millions)	1708.483

RESEARCH EQUIPMENT

Research being an integral part of projects is built in the PC-I while planning project proposals. The state of art equipment is up and running at project facilities. These include much high voltage equipment at University Research Laboratories.

The University has a unique facility having Central Research Laboratory in which postgraduate students and faculty are busy for the accomplishment of their research activities. This facility has several sophisticated research equipments being exclusively used for this purpose. The research projects being executed through this facility/laboratory have generated a lot of research findings in the area of Agriculture, Sciences and Forestry. The Laboratory has also produced a number of skilled and trained manpower in the shape of graduate students who by taking up various positions in Government and non-governmental organizations, could significantly contribute towards the over objective of national economy.

The major equipments available in the Central Research Laboratory are as under:

Name of Equipment	Quantity	Make/Model	Main Specification
Gas Chromatograph	1	GC-NU74 Agilent Technology Singapore	Includes Special Configuration LAN Rs-232 interfaces and 7683 interface, detector EPC Board 6tem ramps, 6 heated zones plus oven, 2 analog out
HPLC	1	SCL-10A, LC-10NT CTO-10AS, SPD-10A, SIL-10AD Shimadzu Japan	Binary pump with automatic variable piston stroke Delay volume 180-482ul <0.3% RSD set points from 0.001 to 5.0 ml/min in 0.001 ml/min 0-40MPa (0-400bar, 0-5880Psi)
DNA Sequencer	1	CEQ-800, Beckman Coulter Switzerland	CEQ Genetic Analysis System 100-240V, 5A, 50/60HZ A fully automated high throughout sequencing and fragment analysis system
Total Organic Carbon Analyzer	1	ASI-V, VCPH, TNM-1 SSM-5000A Shimadzu Japan	High temperature catalytic combustion from 680C ⁰ to 950C ⁰ Method is EPQA4151 Standard methods 5310B, dIN 38409113

Freeze Drier	1	CRYODOS-50 Telstar Spain	Air cooled Refrigerator 0.37KW (1/2 HP). CFC and H-CFC free refrigerant without vacuum pump ice condenser temperature approx. -55C ⁰
Ultra Centrifuge	1	Optima-100P. US Beckman Coulter Switzerland	CE Mark Speeds to 100,000 Rpm g. Forces to 802,400g vacuum-encased, frequency controlled direct drive (induction)
Flame Photometer	1	Jenway-PFP-7	
Deionizer	1	SG Hamburg	Microprocessor controlled purity monitor. Providing digital resistively readings temperature to 25C
Precision Analytical Balance	2	(i) Jex 120 Japan (ii) BL-210S Sortorius Germany	(i) Capacity 120g readability 0.1 mg power (ii) Capacity 210g readability 0.1mg power 220VAC 50/60HZ
Aluminum Block Heater	1	UDK42/26 Italy	Digital Microprocessor Controlled Temperature Settings up to 450C ⁰ built in timer with capacity 42 digestion tubes. Tubes capacity 100 ml operated voltage 220VAC
Oven	2	(i) UE-600 Memmert Germany (ii) 100-800 Memmert Germany	Digital Microprocessor temperature range up to 300C ⁰ capacity -256 Ltr
Porometer	1	AP-4 IRMECO England	Portable, microprocessor controlled. For measurement of stomatal gas flow Measurement Range 0-40S-Cm- 1(resistance) 0.2-30mmS-1 (Conductance)
IRGA/Plant Photosynthesis Analyzer	1	LCA-4 IRMECO England	Different measurements, non-dispersive infra-red gas analyzer Range 0.3000ppm frequency 80HZ Source Life 10,000 Hours
Confocal Microscope	1	TSI Sr. No. 291300105 Canada	Two laser (i) Red (635) (ii) Green (532), Two Micron-Optical, Resolution using one micron

STRENGTHENING TECHNOLOGICAL INFRASTRUCTURE

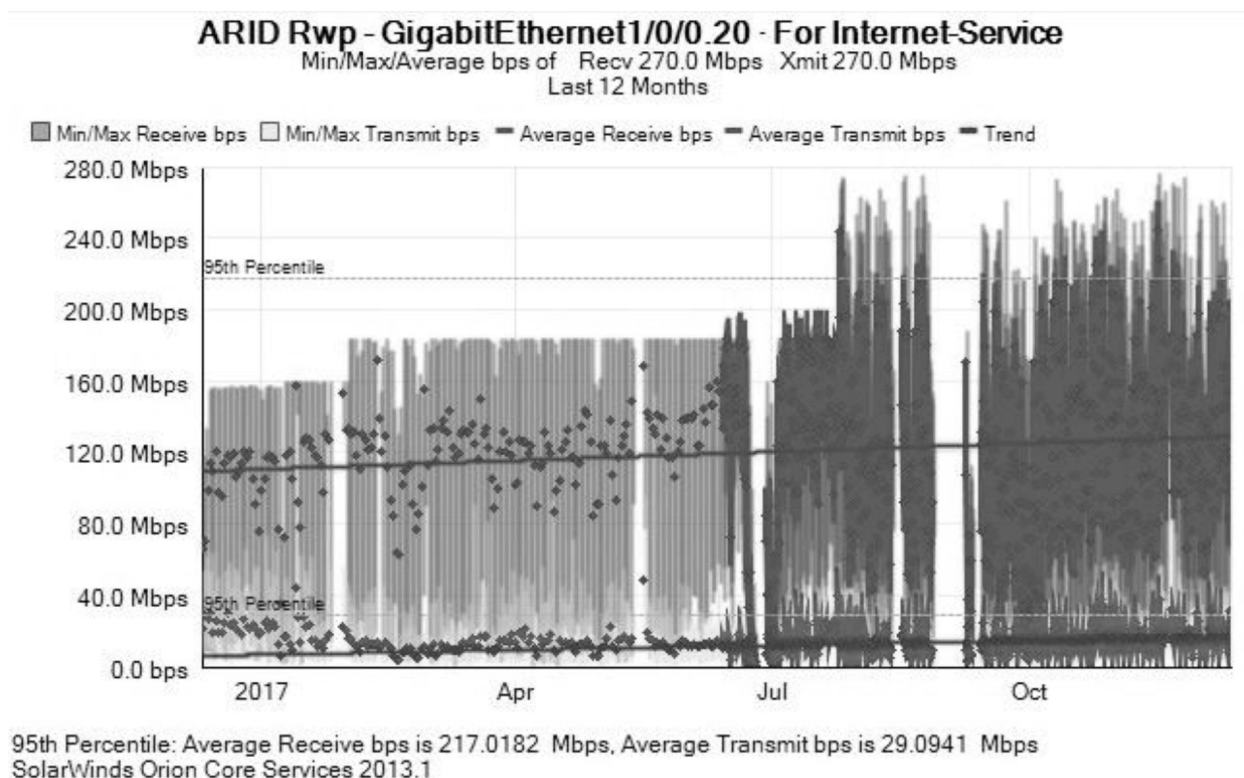
DIGITAL LIBRARY

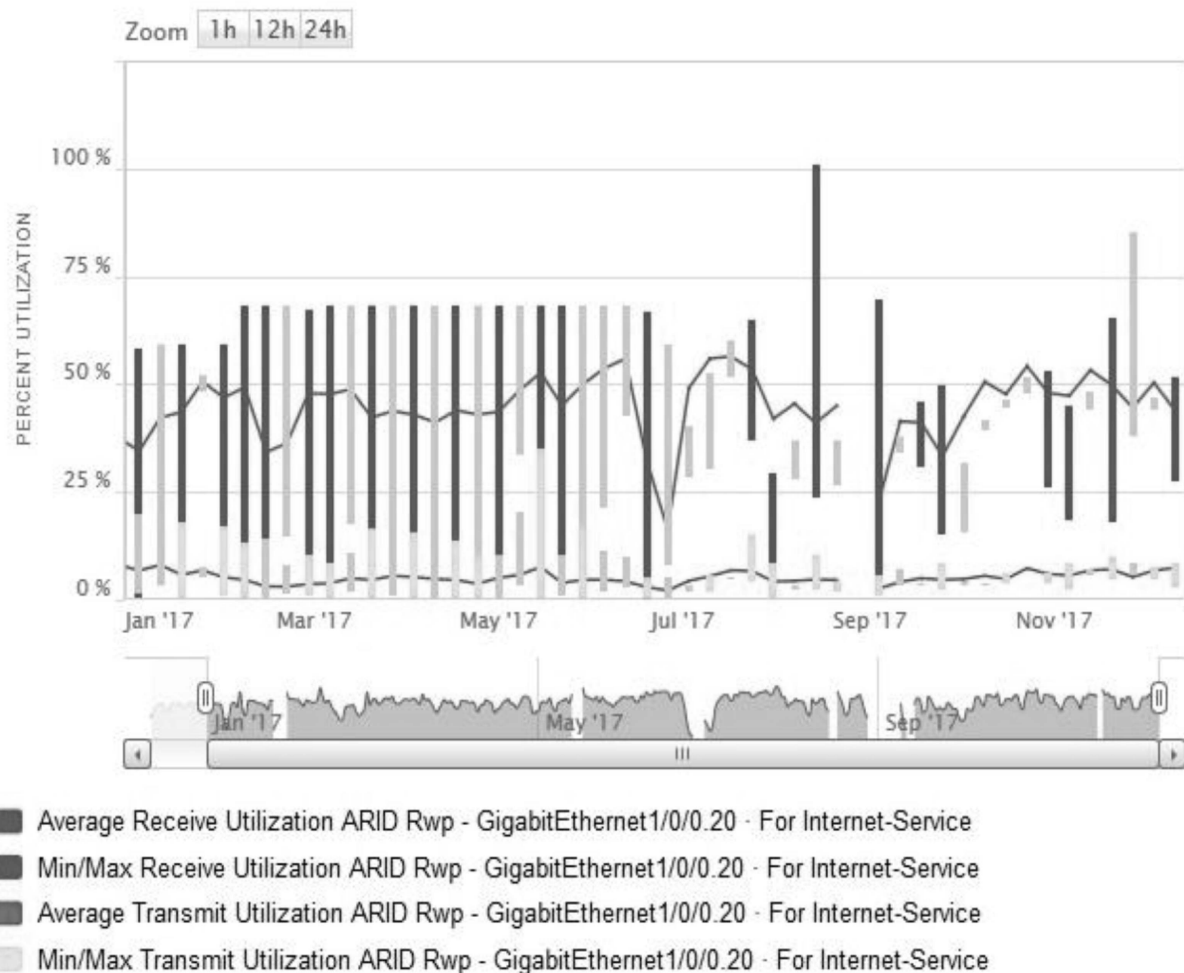
Digital Library 24/7 has easy access in our Network internet protocols (IPs), Usage data of digital library has managed by Pakistan Educational Research Network HEC.

Update on PERN:

Pakistan Education and Research Network, we are connected with HEC PERN2 with bandwidth of 270MB, campus network (24/7 Access), server virtualization management, load balancing, reliable, scalable, environmental protection, wireless network facility (Boys and Girls hostels) and digital library throughout the university network.

Network Availability in PMAS-AAUR Graph





Video Conferencing System:

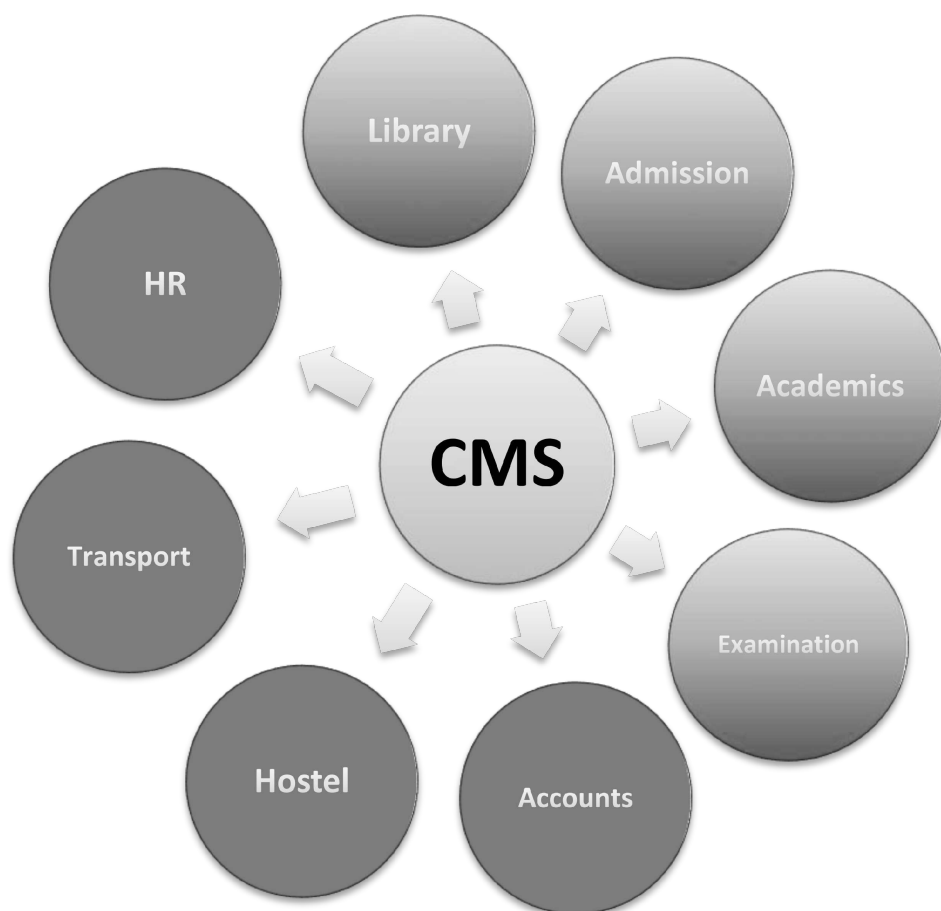
Video conferencing equipments and software installed at conference room University Institute of Information Technology (UIIT). It's set up consist of HD video cam, premium audio system, recording facility, presentations equipments and sound proofed room with live IP address that is connected with 24/7 online support meeting capabilities and competent compelling team.

CAMPUS MANAGEMENT SYSTEM

INTRODUCTION

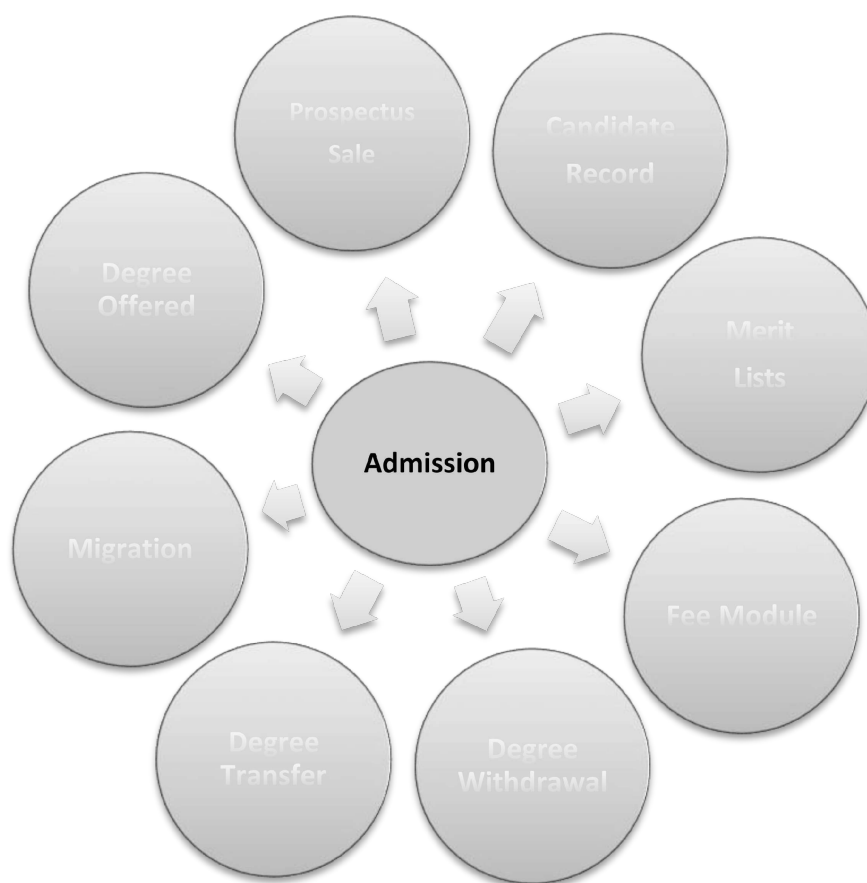
- Campus Management Solution is the most effective tool that has automated the management functionality of this university by streamlining some of the processes involved.
- It has reduced the manual handling of processes and thus helps in effective and accurate outcomes.
- CMS also helps in maintaining transparency in admissions and accounts processes and reduces administrative overhead by providing powerful services.
- It helps in effective decision making of authorities by generating reports from different aspects.

CMS-A GLANCE



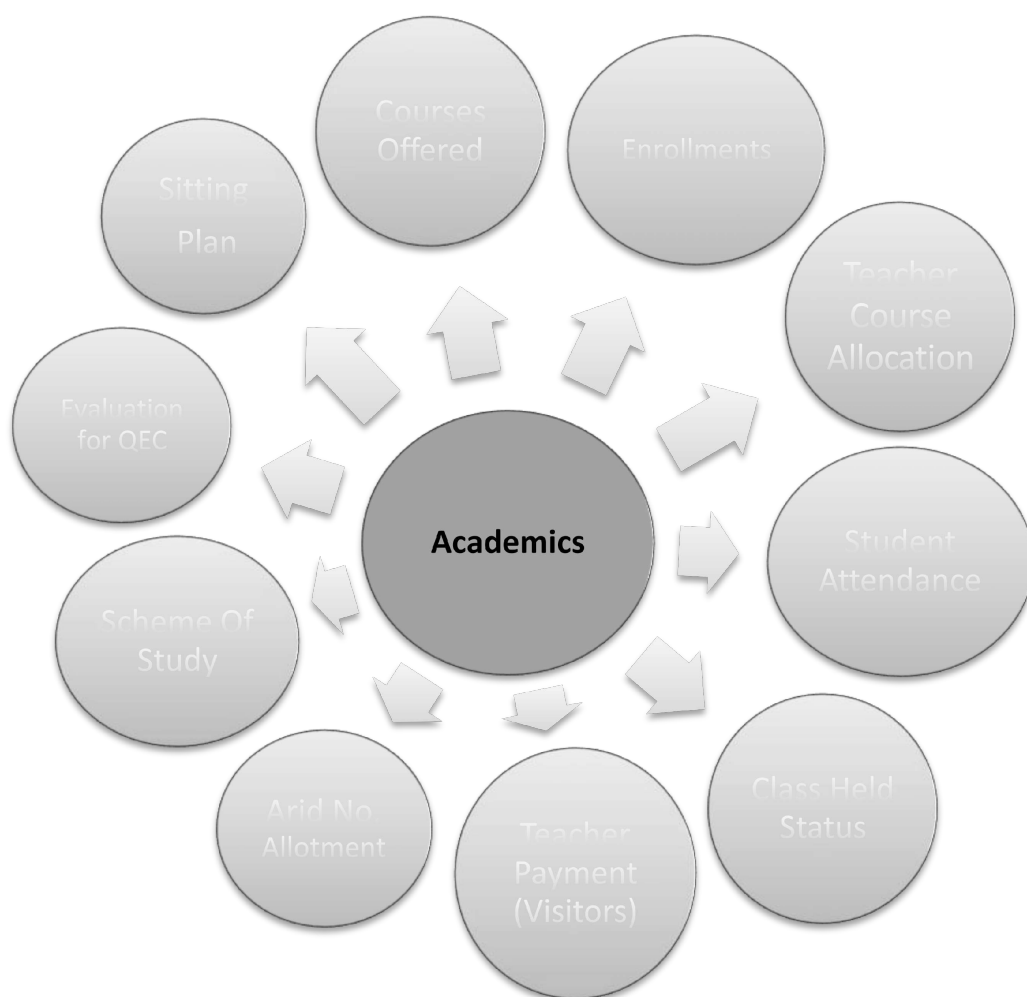
ADMISSION-A GLANCE

- Prospectus Sale Report
- Date wise Candidate entry report
- Tracking Of Merit(Waiting Merit List)
- Total vs Vacant Seats Information Report
- Fee Vouchers Generated through system
- Banks Uses Fee Module
- Fee Reports in different formats
- Bank Departments and Treasure Office Reconcile fee Data
- Different Fee Structure
- Fee Installment
- Quota System
- Admission Scroll



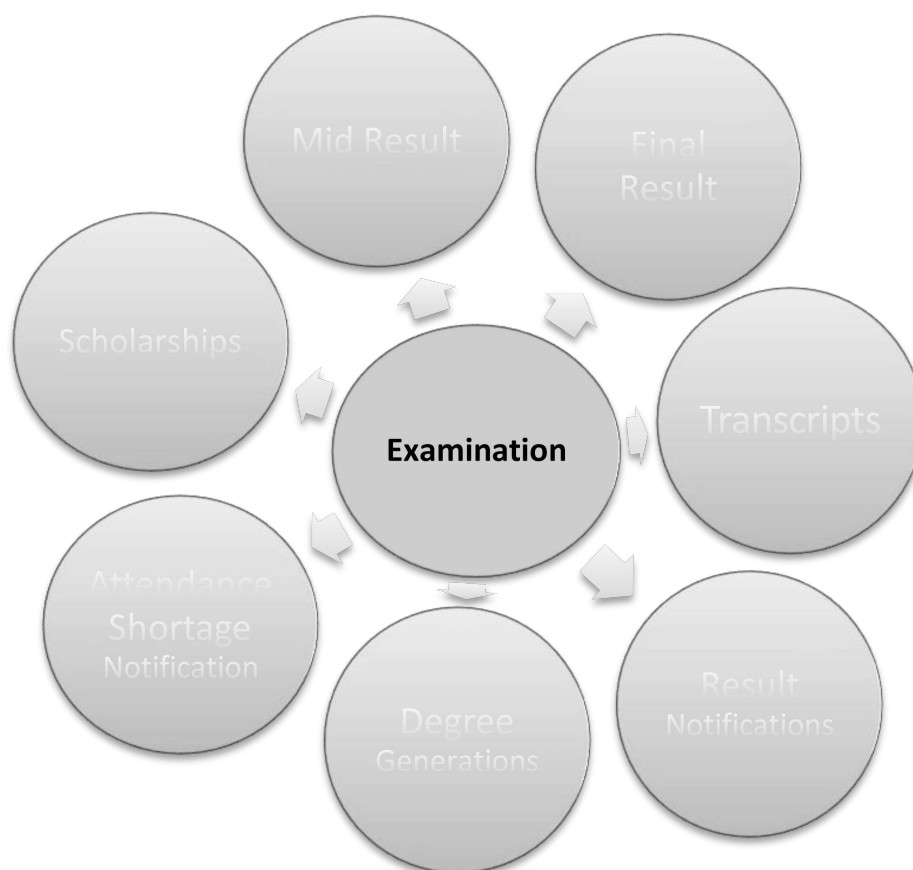
ACADEMICS-A GLANCE

- Student's University Card
- GS-10/ GS-12 Reports in different formats
- Attendance/Enrollment Status online at university network
- Teacher Evaluation Reports (Graphical)for QEC
- Section Assignments
- Students Attendance Sheets
- Attendance shortage Attendance Feeding status
- Student Profile

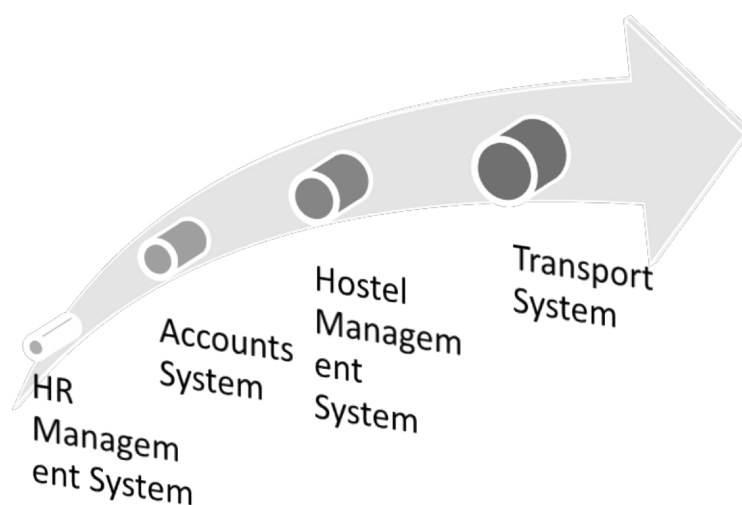


EXAMINATION-A GLANCE

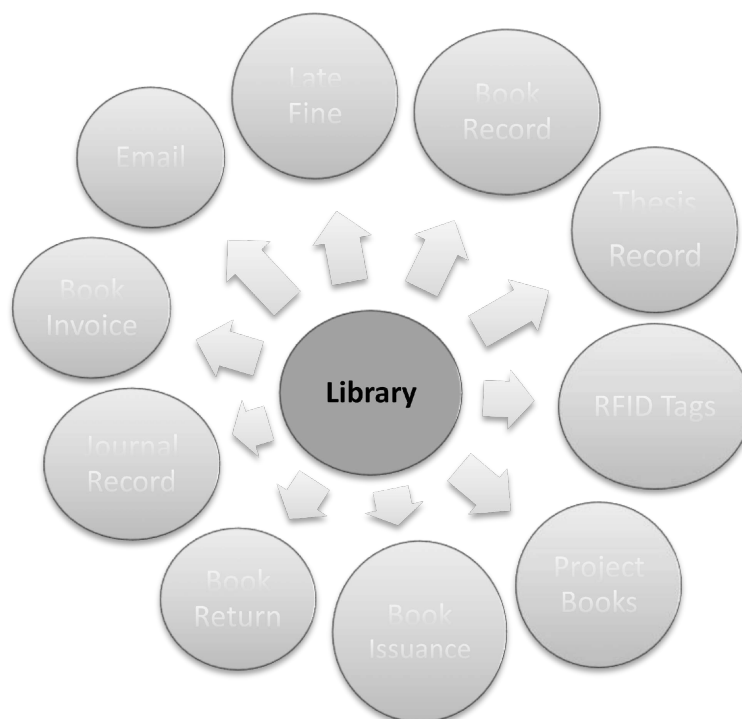
- Calculation of GPA, CGPA, Quality Points, Grades & All others Report Cards required to Controller Office and any other departments.
- Exam Attendance Sheet
- Award List
 - Mid Result
 - Final Result
- Transcripts
- Medal Lists
- Semester Result Notifications
- Final Result Notifications
- Provisional Certificate
- Degrees Printing
- Graduate Directory



FUTURE ENHANCEMENT



LIBRARY-A GLANCE



WEB PORTAL

The web portal consist of different modules, some are given below:

Scholarships: University offers different scholarship programs (e.g. HEC, USAID, PEEF, Shahbaz Sharif Merit scholarship etc) for the deserving students. Web portal facilitates those students to apply online for these scholarship programs.

Alumni Junction: Graduates of different faculties can register through this forum for development of friendly and business relationships.

Job Portal: The University has about number of registered members on its Alumni Association who has been regularly informed about various job openings through electronic emails to the members.

Academics: In this section all faculties and respective departments which are related to university have all the information i.e. faculty's basic information, staff members, degree programs and their completed or ongoing research projects.

Admissions: This section provides all the information about latest admission programs which are offer by the university and provide a facility to apply online.

Complaint Cell: Website has provided the platform in which different walk of personnel can send their queries related to university. The concerned department can then entertain those queries accordingly.

News & Events: Web portal has provided all information about the events which are held in university. This information is in the form of news, photos, videos and in print media. This section also contains the information about the latest jobs and tenders.

Admin Panel: All the data in web portal is manage through admin panel (i.e. upload, edit, delete). This includes photos, videos, news, press clipping, tenders, staff member information and events.

Admin Panel -SRC: There is also admin panel for SRC through which they can manage alumni data of the registered members. They can send emails for new job announcements to members. Latest events are also handles through this panel. Along with all these, web portal provides the download facility for different manuals, Performa, application forms, notes, membership forms and scholarship forms.

Faculty Briefcase: Web portal has provided the facility of Briefcase for all faculty members. Faculty members can upload material (lectures, Assignments, Quizzes etc.) on it, after successful creation of their accounts.

Admin Panel for Faculty Briefcase: All the data in Briefcase and the creation of faculty member accounts is managing through admin panel.

Development of Online Admission:

The web portal provides all the information about latest admission programs which are offer by the university and it also facilitates the candidates to apply online. For this ease number of applicants throughout the Pakistan had applied through website during the last session. The website also uploads the list of eligible students (Merit lists). If student name is in the list, in turn they can enter CNIC in the form to download the fee challans.

Admin Panel Online Admission portal: There is also an admin panel for Admission portal through which they can received online form of all the candidates who's apply online throughout the Pakistan. The candidate also checks their application form status, if is it received or not.

UNIVERSITIES BUILDING COMMUNITIES

UNIVERSITY-COMMUNITY INTERACTION

PMAS-AAUR is one of the leading higher education institutions in Pakistan. It plays a major role in grooming future leaders who can make a positive difference to the world around them. University has been involved with numerous community support programs. It has been working with different NGOs, government, semi-government/ non-profit organizations.

UNIVERSITY'S ROLE IN BUILDING COMMUNITY

The University has a significant social impact on the region. This impact extends beyond the staff and students to the broader community in general. University offers a wide range of cultural and recreational programs, contribute to the provision of health and community services, provide services to local government and provide assistance to community groups. In addition to providing research, cultural and social fields, university provides valuable infrastructure for the community including venues for public events, libraries, sporting facilities and research laboratories.

The scholarly activities of a university serve to enhance the reputation of the local region both nationally and internationally. This may result in an increased attractiveness of the region to industries and investments. The University also offers regional communities a better chance to retain their talented youth population.

The students, faculty and administration of PMAS-Arid Agriculture University Rawalpindi have always worked tirelessly to serve their countrymen and at the time of floods when a catastrophe has hit our motherland, the university once again standing united to help the people of these areas in dealing with the after affects of this devastating flood. The University also dispatched the relief goods to the flood affected areas.

ALUMNI AFFAIRS: OUTSTANDING ACHIEVEMENTS ETC.

Career Counseling is important and have vital role in student's professional life. University Administration of PMAS-Arid Agriculture University Rawalpindi established a specific Career Counseling Centre (Directorate of Financial Assistance & University Advancement) as per requirement of current era. Directorate of Financial Assistance & University Advancement regularly share jobs (published in print & electronic media) with University Alumni and Final Semester Students. Punjab Higher Education Commission has very kindly allocated the funds for strengthening the Career Counseling Centre of PMAS-Arid Arid Agriculture University Rawalpindi.

Followings are the details of the career counseling workshops and trainings organized for University Scholars:

S. No.	Title of the Training / Workshop	Month
1.	Distribution of PEEF Scholarship Cards	19 th May 2017
2.	Prime Minister's Laptop Distribution Ceremony	24 th May 2017
3.	Entrepreneurial Skills Development Training Workshop for PEEF Scholarship Awardees	28-31 Dec 2017

SPORTS

The Directorate of Sports is working hard for the promotion of sports and healthy activities at PMAS-Arid Agriculture University. The beautiful and prestigious **Khalid M. Khan Gymnasium** was completed in the university premises in 2010. The following Intervarsity Sports Championship was organized by Directorate of Sports:



PMAS-AAUR Students team also participated in the following Intervarsity Sports Championship during the year.

- **INTER UNIVERSITY CRICKET CHAMPIONSHIP, 2016-17 (Zone “C”)** held at COMSATS, Islamabad (Nov. 2016)
- **All PAKISTAN INTER UNIVERSITY ATHLETICS BOYS CHAMPIONSHIP, 2016-17** held at Pakistan Sports Board, Islamabad (COMSATS) Nov.22-24, 2016)
- **All PAKISTAN INTER UNIVERSITY ATHLETICS GIRLS CHAMPIONSHIP, 2016-17** held at Pakistan Sports Board, Islamabad (COMSATS) Nov.22-24, 2016)
- **INTER UNIVERSITY BADMINTON CHAMPIONSHIP, 2016-17 (Zone “C”)** held at Bahria University, Islamabad (Nov. 22-25, 2016)
- **INTER UNIVERSITY VOLLEYBALL CHAMPIONSHIP, 2016-17 (Zone “C”)**organized and Participated by PMAS-AAUR (Jan. 17-20, 2017)
- **INTER UNIVERSITY TABLE TENNIS CHAMPIONSHIP, 2016-17 (Zone “C”)** held at University of Engineering and Technology, Taxila (Jan. 27-30, 2017)
- **INTER UNIVERSITY BASKET BALL CHAMPIONSHIP, 2016-17 (Zone “C”)** held at Bahria University, Islamabad (Feb. 13-16, 2017)
- **INTER UNIVERSITY FOOTBALL CHAMPIONSHIP, 2016-17 (Zone “C”)** held at COMSATS, Islamabad (March 19-22, 2017)

- **INTER UNIVERSITY BOYS VOLLEYBALL CHAMPIONSHIP, 2016-17 (Final Round)** held at University of The Punjab Lahore (April 26-29, 2017)
- **ALL PAKISTAN INTER UNIVERSITY TUG OF WAR CHAMPIONSHIP, 2016-17** held at Shaheed Benazir Bhutto University, Sheringal, Dir Upper (May 12-15, 2017)
- **INTER UNIVERSITY CHESS CHAMPIONSHIP, 2016-17** held at University of Veterinary & Animal Sciences, Lahore (May 22-25, 2017)
- **ALL PAKISTAN INTER UNIVERSITY BOYS ARCHERY CHAMPIONSHIP, 2016-17** held at University of Veterinary & Animal Sciences, Lahore (May 22-25, 2017)
- **ALL PAKISTAN INTER UNIVERSITY GIRLS ARCHERY CHAMPIONSHIP 2016-17** held at University of Veterinary & Animal Sciences, Lahore (May 22-25, 2017)

The following Inter Faculty Sports Competitions were organized by Directorate of Sports during the year.

- **INTER FACULTY BADMINTON (BOYS) CHAMPIONSHIP, 2016-17**
- **INTER FACULTY VOLLEYBALL (BOYS) CHAMPIONSHIP, 2016-17**
- **INTER FACULTY BASKETBALL(BOYS) CHAMPIONSHIP, 2016-17**
- **INTER FACULTY TABLE TENNIS (BOYS) CHAMPIONSHIP, 2016-17**
- **INTER FACULTY CRICKET (BOYS) ARIDIAN PREMIER LEAGUE CHAMPIONSHIP, 2016-17**
- **INTER FACULTY FOOTBALL (BOYS) CHAMPIONSHIP, 2016-17**
- **INTER FACULTY TUG OF WAR (BOYS) CHAMPIONSHIP, 2016-17**
- **INTER FACULTY 100 METER (BOYS) CHAMPIONSHIP, 2016-17**
- **INTER FACULTY BOYS HANDKERCHIEF CHAMPIONSHIP, 2016-17**
- **INTER FACULTY GIRLS 100 METER CHAMPIONSHIP, 2016-17**
- **INTER FACULTY GIRLS LONG JUMP, 2016-17**
- **INTER FACULTY HANDKERCHIEF GIRLS CHAMPIONSHIP, 2016-17**
- **INTER FACULTY 400 METER GIRLS CHAMPIONSHIP, 2016-17**
- **INTER FACULTY VOLLEYBALL GIRLS CHAMPIONSHIP, 2016-17**
- **INTER FACULTY TUG OF WAR GIRLS CHAMPIONSHIP, 2016-17**
- **INTER FACULTY BADMINTON (GIRLS) CHAMPIONSHIP, 2016-17**

UNIVERSITIES BUILDING LEADERSHIP

STUDENT LEADERSHIP (UNIVERSITY DRAMAS, EXHIBITIONS, EXPOS, COMPLETIONS, DEBATES AT NATIONAL AND INTERNATIONAL LEVELS)

Sr.#	Events Name	Events Date
1.	Blood Donors Award Ceremony	January, 2017
2.	Indus Consortium	March, 2017
3.	3 rd Potohar Art & Literature Festival	29 to 31 March, 2017
4.	PODA Screening Film	April, 2017
5.	Declamation contest at Preston University	April, 2017
6.	Quiz Competition on the Constitution of Pakistan & International Human Rights Instruments (PODA)	May, 2017
7.	A day out with army	May, 2017
8.	Declamation Contest at University of Lahore, Quaid-e-Azam Campus	May, 2017
9.	Karwan-e- Yakjehti 2017- August 13-14, 2017 at Quetta	August, 2017
10.	Basic Life Support Training Project FUMC-HEC	November, 2017
11.	Celebration of Anti-Corruption Day	December, 2017
12.	Seminar on Drug Addiction and its Consequences	December, 2017

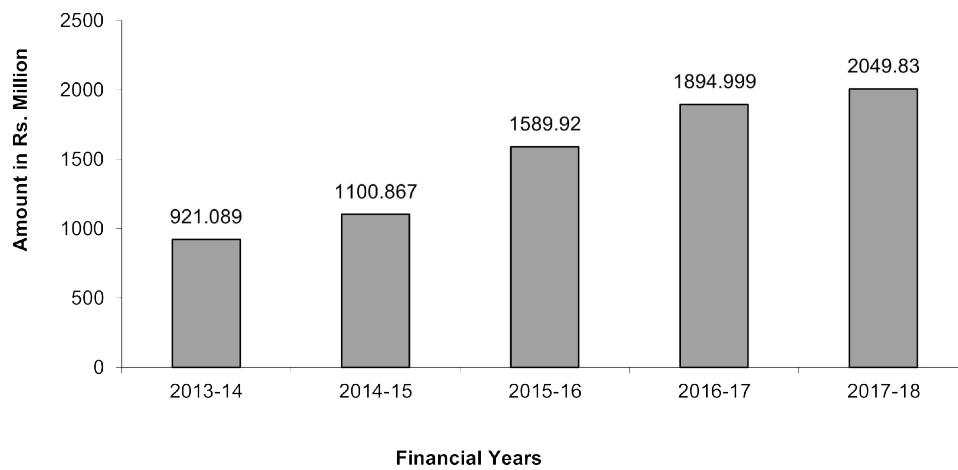
FINANCE

SUMMARY OF REVISED BUDGET ESTIMATES FOR THE YEAR 2017-2018

INCOME ESTIMATES				EXPENDITURE ESTIMATES			
Sources of Income	Estimates 2016-17	Revised Estimates 2016-2017	Estimates 2017-2018	Head of Accounts	Estimate s 2016-2017	Revised Estimates 2016-17	Estimates 2017-18
Opening Balance	410000000	537048649	506109585	Pay and Allowances	764347513	756761642	867455435
Punjab Government	78423000	78423000	78423000	Purchase of Durable Goods	27200000	33200000	35000000
Federal Government	606153658	587418000	631180641	Research Projects	10500000	10500000	12500000
Supplementary Grant from Federal Government	20000000	20000000	20000000	Construction Work	272867403	329255701	377236549
Own Resources	284936517	290635247	357712957	Repair of Durable Goods	8500000	13000000	12500000
University Fee From UIMS	90867599	91776275	92517384	Commodities & Services	140150000	166050000	157720000
University Fee from UIIT	168750974	172125993	229076200	Transfer Payments	140320000	140320000	156000000
Income from Affiliated Institutes	25606505	44830997	60500000	Miscellaneous Expenditure	27244900	32416000	32200000
Khushab Campus	11655013	12673960	17406720	Contingent Paid Staff	29000000	31300000	31300000
Federal Government Grant for Tenure Track Faculty	10762560	15269813	16344750	Overtime/Evening sitting	9800000	9800000	9800000
Federal Government Grant for Need Base Scholarships	28217000	33501000	33501000	Reimbursement of Medical Charges	7500000	7500000	7500000
PMAS-AAUR Sub Campus Attock	6000000	11296370	6410800	Building Rent	2000000	2000000	2000000
				UIMS Department	58236283	21340000	63569950
				UIIT Department	72649294	74037914	75631955
				IT Network Data Centre	26266794	30065457	33767408
				PMAS-AAUR Sub Campus Khushab	35224384	49494017	47817315
				UAAR Research Farms Chakwal Road	24285679	27047789	27033953
				Tenure Track System	10762560	15269813	16344750
				PMAS-AAUR Sub Campus Attock	2625000	17873416	17360068
				Institute of Hydroponic Agriculture	23080491	32950521	32934654
				PMAS-AAUR FM Radio	20000000	21623284	-----
				Need Based Scholarships	28217000	33501000	33501000
Total	1741372826	1894999304	2049183037	Total	1740777301	1855306554	2049173037

FINANCIAL YEAR AT A GLANCE

SUMMARY OF BUDGET ESTIMATES



RECURRING BUDGET

Recurring Funding (Punjab Govt.) In millions Rs.						
2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
41.36	43.079	50.241	55.265	73.984	78.423	78.423
Recurring Funding (HEC) In millions Rs.						
2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
298.117	364.251	414.441	464.379	533.344	606.153	667.525

TREND OF PER STUDENT SPENDING

For FY 2016-17 = Projected as Rs. 106,102 per student on total expenditure basis

For FY 2017-18 = Projected as Rs. 169,378 per student on total expenditure basis

SELF GENERATED INCOME

For FY 2016-17 = Rs 623.338 Millions

For FY 2017-18 = Rs 763.624 Millions

SUMMARY OF DEVELOPMENT BUDGET ESTIMATES (2017-18)

S. No.	Name of Project	Estimated Cost (Rs. In m)	Total Exp. Upto (30.06.16) Actual (Rs. In m)	Unspent Balance Carried Forward for (2016-17) (Rs. In m)	Releases during (2016-17) (Rs. In m)	Total Available Funds (2016-17) (5+6) (Rs. In m)	Exp. During (2016-17) (Rs. In m)	Total Exp. (4+8) (Rs. In m)	Unspent Balance Carried forward 2017-18 (7-8) (Rs. In m)	PSDP Allocation (2017-18) (Rs. In m)	Estimated Budget During (2017-18) (10+11) (Rs. In m)
1	2	3	4	5	6	7	8	9	10	11	12
i.	Strengthening of Agricultural Engineering & Women Development Programs at PMAS-AAUR	751.244	133.917	266.083	100.000	366.083	251.626	358.543	114.457	251.244	365.701
ii.	Testing Indigenous Hydroponic Greenhouse for Vegetable Growing at Various locations in Punjab	77.571	0.000	0.000	66.350	66.350	64.854	64.854	1.496	11.221	12.717
iii.	Establishment of Sub Campus of PMAS-AAUR at Attock (Phase II)	879.668	0.000	0.000	130.000	130.000	43.182	43.182	86.818	421.016	507.834
	Grand Total	1708.483	133.917	266.083	296.35	562.433	359.662	493.579	202.771	683.481	886.252

AUDIT REPORT



DIRECTOR GENERAL AUDIT PUNJAB

6th Floor, AG Punjab Complex
Phone No: 042-99210147 Fax No: 042-99210166

1. SIGNATURE BLOCK

SEEN AND DISCUSSED CERTIFICATE

Except that contained in the forgoing paragraphs, the maintenance of accounts was found satisfactory.

Audit				
Name	Designation	Authority	Signature	Date
Mr. Muhammad Rizwan Talib	Audit Officer	AIR Issuance Authority		
Mr. Muhammad Naveed	Senior Auditor			

Entity				
Name	Designation	Organizational Role	Signature	Date
Syeda Irum Umer	Treasurer	DDO		
Raja Arsal Mehd	Dy Treas	DDO (Financial Power up to Rs. 25,000)		
Abdul Wahid	Dy Treas	DDO (Financial Power up to Rs. 25,000)		

UNIVERSITY GOVERNANCE

SYNDICATE

The syndicate is the executive body of the University. Subject to the provisions of the Act and the Statutes, it takes effective measures to raise the standard of teaching, research and publications and other academic pursuits and exercises general supervision over the affairs and management of the property of the University. During the reporting period, one (01) Syndicate meeting was arranged and necessary decisions were taken in the best interest of PMAS-AAUR.

The University Syndicate consists of:

a.	The Vice Chancellor	Chairman
b.	Member of Provincial Assembly of the Punjab nominated by the Speaker of the Assembly	Member
c.	Chief Justice of the Lahore High Court, or his nominee	Member
d.	Secretary, Department of Agriculture, Government of Punjab, Lahore	Ex-officio Member
e.	Secretary, Department of Livestock and Dairy Development, Government of Punjab, Lahore	Ex-officio Member
f.	Secretary, Department of Finance, Government of the Punjab, Lahore.	Ex-officio Member
g.	One nominee of the Higher Education Commission	Member
h.	One Dean to be nominated by the Chancellor on the recommendations of the Vice Chancellor	Member
i.	Four elected members from the University faculty	Members
j.	Three persons of eminence to be nominated by the Chancellor	Members
k.	The Registrar	Secretary

ACADEMIC COUNCIL

The Academic Council is the academic body of the University. It is responsible to lay down proper standards of teaching / instructions, research, publications and examinations and to regulate and promote the academic life at the University. In year 2017, one (01) meeting of Academic Council was conducted, wherein revised/amended and new curricula for Undergraduate and Postgraduate studies were discussed and approved. The general rules and regulations pertaining to academic and administration were also argued and the decisions were made for implementation.

The Academic Council consists of:

a.	The Vice Chancellor	Chairman
b.	The Deans of the Faculties	Members
c.	The Directors of the Divisions/Institutes	Members
d.	All University Professors including Professors of Emeritus	Members
e.	The Chairmen/Chairpersons of the Teaching Departments	Members
f.	All Associate Professors	Members
g.	Two Assistant Professors and two Lecturers to be elected by and from amongst themselves	Members
h.	The Librarian	Members
i.	The Controller of Examinations	Members
j.	Two Agricultural Scientists to be nominated by the Chancellor	Members
k.	Four representatives of NARC to be nominated by the Director General, NARC, Islamabad	Members
l.	The Registrar	Member/Secretary

ADVANCED STUDIES AND RESEARCH BOARD

The Advanced Studies and Research Board advise the authorities on all matters concerning promotion of advanced studies, publications and research in the University. The board considers and reports to the authorities on the institution of research degrees in the University. In the academic year 2017, Advanced Studies & Research Board was met for two times; the board afforded approvals and advised amendments, where necessary, on admission to post-graduate level, synopsis and research titles of post-graduate students, rules and regulations. The Board also scrutinized various research projects and approved / referred for revision.

Advanced Studies and Research Board consists of:

a.	The Vice Chancellor	Chairman
b.	The Deans	Members
c.	Directors of the Divisions and the Institutes of the University	Members
d.	Principals of Affiliated Colleges/ Directors of affiliated Institutes	Members
e.	Three University Professors, other than Deans, to be appointed by the Syndicate	Members
f.	Three University teachers to be appointed by the Academic Council	Members
g.	Five experts from other sister Institutions to be nominated by the Syndicate	Members
h.	Director Advanced Studies	Secretary

FINANCE AND PLANNING COMMITTEE

The Finance and Planning Committee advise the Syndicate on all matters relating to planning, development, finance, investments, and accounts of the University. In year 2017, two (02) meetings of Finance and Planning Committee were conducted

The Finance and Planning Committee consists of:

a.	The Vice Chancellor	Chairman
b.	One member of the Syndicate to be appointed by the Syndicate	Member
c.	Two members of the Academic Council to be appointed by the Academic Council	Members
d.	Two nominees of the Chancellor, one each from Agriculture Department and Finance Department, Punjab	Members
e.	The Registrar	Member
f.	The Treasurer	Member/Secretary

CAMPUS COMMITTEE

The syndicate of the University approved the constitution of Campus Committee with the following Rules of Business:

- To approve all estimates for the purchase of lands and construction work on the campus
- To engage Architects and Engineering consultants
- To let out works to the contractors
- To do other necessary works to complete the construction at the campus

In year 2017, two (02) meetings of Campus Committee were conducted. The Campus Committee consists of:

a.	The Vice Chancellor	Chairman
b.	Director General RDA or His representative	Member
c.	Superintending Engineer Building Department Rawalpindi.	Member
d.	EDO Works Rawalpindi.	Member
e.	DCO Rawalpindi or His representative (for purchase of Land)	Member
f.	Dean FA&ET	Member
g.	Principal Officer Student Affairs	Member
h.	Principal Officer Estate Care & Security	Member
i.	The Registrar	Member
j.	The Treasurer	Member
k.	The Resident Auditor	Member
l.	Project Director Works	Member
m.	Director Planning & Development	Member/Secretary

DELEGATIONS AND VISITS

- University of UTAH, USA Delegation visited PMAS-AAUR on May 04, 2017. The University of UTAH, USA and PMAS-Arid Agriculture University Rawalpindi have agreed to initiate collaboration in research projects & academic programs to resolve water crises, through developing human resource, technologies and policy formulations. It was decided in a meeting of Vice Chancellor Prof. Dr. Rai Niaz Ahmad and a delegation of UTAH University headed by Prof. Tariq Banuri.
- The University of Science and Technology of China (USTC) delegation headed by Mr. Jiajie Jiang, the deputy director of International Cooperation visited Pir Mehr Ali Shah - Arid Agriculture University, Rawalpindi (PMAS-AAUR), on August 29, 2017. The delegation met with PMAS-AAUR Vice Chancellor Professor Dr. Rai Niaz Ahmad and discussed the areas of mutual interest to collaborate in future in various disciplines of both of the universities.
- World Bank Delegation Visited PMAS- Arid Agriculture University Rawalpindi on September 23, 2017. A meeting on ' Strengthening markets for Agriculture and Rural transformation (SMART) in Punjab was also held in collaboration with Research & Extension wing of the World Bank. Mr. Derek Byerlee, Head Research Work at World Bank and Dr. Mubarik Ali, Consultant at World Bank were the guests of honor. The objective of this meeting was to discuss the research and extension components of agriculture and to explore the gaps among research, industry and extension in order to strengthen market and rural transformation process in Punjab.
- National Agriculture Education Accreditation Council (NAEAC) launched second round of accreditation process in January 2017 in all the main agriculture universities of Pakistan and visited Pir Mehr Ali Shah, Arid Agriculture University, Rawalpindi for two days on October 25-26, 2017, for the second round of external evaluation and accreditation. The Four Accreditation Inspection Committees (AICs) approved by the Chairman NAEAC consist of subject experts/program evaluators to undertake external peer review of the degree programs of Agronomy, Soil Science, PBG and Entomology in order to carry-out the review process under second round of on-site visit at PMAS AAUR.

- A six members delegation from Guizhou Academy of Sciences, China headed by Prof. Zhang Hongjiang visited Pir Mehr Ali Shah Arid Agriculture University Rawalpindi on December 4, 2017 to see the potential for development of mountainous agriculture, situation of economic crop cultivation in Pakistan, sharing information regarding agricultural products & crop pest control and to explore the further possibilities to exchange technical knowledge & establish a mutual working relationship between both the institutions.
- Research Group from College of Veterinary Medicine Nanjing Agriculture University Visited Department of Pathobiology of the University on December 19-20, 2017.

FACULTY PUBLICATIONS

1. Abbas, M.F., F.Naz, C.A.Rauf, G.Irshad, N.A.Abbasi and N.M.Khokhar. 2017. First report of *Fusarium solani* causing fruit rot of loquat (*Eriobotrya japonica*) in Pakistan. Plant disease. Doi/abs/10.1094/PDIS-10-16-1544-PDN (IF=3.192).
2. Abbas, Q., S. W. Khan, M. Ismail, S. Ali and R.Qureshi. 2017. Antioxidant, antiglycation and immunomodulatory activities of selected medicinal plants from central Karakoram National Park (CKNP) Gilgit, Pakistan. Pak. J. Bot. 49(SI): 171-175. (Impact Factor: 0.69).
3. Abd El-Ghani, M.M., F.M.Huerta-Martinez, L.Hongyan and R.Qureshi. 2017. Plant responses to hyper arid desert environments. Springer International Publishing, New York, USA (ISBN: 978-3-319-59134-6).
4. Adeel, M., B.N.Siddiqui, W.U.H.Tareen, A. Rayit and S. Fahad. 2017. Working efficiency of extension field staff with regard to integrated pest management of cotton in district D. G. Khan, Punjab, Pakistan. J. Rur. Dev. Agric. 2(1): 26-40.
5. Adil, M.I., F.Khan, M.T.A.Shah and B.N.Siddiqui. 2017. Cost return analysis in wheat production in federally administrated tribal area, Pakistan. J Agric. Res. 55(2): 417-425. (HEC Recognized).
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7. Ahmad, A., M.Ashfaq, T.Mukhtar and S.I.Malik. 2017. An insight into recombination in CP gene of tomato infecting Chilli Veinal mottle virus isolate from Pakistan. International Journal of Biosciences. 11(4):48-54.
8. Ahmad, A., M.Ashfaq, T.Mukhtar, S.I.Malik, I.Anwer, M.Ahsan and T.Riaz. 2017. Detection of natural infection and reaction of tomato lines to potato virus Y in Pakistan. International Journal of Biosciences. 11(1):343-350.
9. Ahmad, A., U.Irfan, R.M.Amir and K.S.Abbasi. 2017. Development of high energy cereal and nut granola bar, international Journal of Agriculture and Biological Sciences, 1(3): 13-20.
10. Ahmad, B., B.N.Siddiqui and F.Khan. 2017. The role of private tobacco companies in promotion of tobacco crop at Malakand division, Pakistan. Int. J. Agric. Environ. Res. 3(4): 282-289.
11. Ahmad, M., F.Ul-Hassan, G.Qadir and F.A.Shaheen. 2017. Response of proline accumulation in bread wheat (*Triticum aestivum* L.) under rain fed conditions. Journal of Agricultural Meteorology (The Society of Agricultural Meteorology of Japan.) 73(4): 147-155. (IF = 0.925).

12. Ahmad, S., and M.A. Aziz. 2017. A review: risk assessment of pesticides on honey bee and pollination of agriculture crops in Pakistan. *Asian J. Agri. Biol.* 5(3): 140-150.
13. Ahmad, S., G.Abbas, Z.Fatima, R.J.Khan, M.A.Anjum, M.Ahmed, M.A.Khan, C.H.Porter and G.Hoogenboom. 2017. Qualifications of the impacts of climate warming and crop management on canola phenology in Punjab, Pakistan. *Journal of Agronomy and Crop Science*. DOI:10.1111/jac.12206.
14. Ahmad, S., M. A. Aziz, A.Aftab, Z. Ullah, M.I. Ahmad and A. Mustan. 2017. Epidemiology of dengue in Pakistan, present prevalence and guidelines for future control. *IJMR*. 4(6): 25-32.
15. Ahmad, S., M.A. Aziz, M. Ahmad and I. Bodlah. 2017. Effects of queen age on hygienic and grooming behavior of *Apis mellifera* Ligustica against Varroa destructor (Anderson and Trueman). *Asian J Agri. Biol.* 5(3):113-118.
16. Ahmad, S., M. Nadeem, G.Abbas, Z.Fatima, R.J.Z.Khan, M.Ahmed, A.Ahmad, G.Rasul and M.A.Khan. 2017. Quantification of the effects of climate warming and crop management on sugarcane phenology. *Climate Research*.71.47-61.doi: 10.3354/cr01419.
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19. Ahmed, M., C.O.Stockle, R.Nelson and S.Higgins. 2017. Assessment of climate change and atmospheric CO2 impact on Winter wheat in the Pacific Northwest Using a Multi model Ensemble. *Frontiers in Ecology and Evolution* 5. <https://doi.org/10.3389/fevo.2017.00051>.
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ANNEXURE-II**SEMINARS, WORKSHOPS & CONFERENCES****SEMINARS, WORKSHOPS & CONFERENCES HELD AT UNIVERSITY**

Sr.No	Title of Events	Date
1.	Seminar on IP Sec. VPN Tunnel	12.01.2017
2.	Training workshop on Self-Assessment Program for New Program Teams	26.01.2017
3.	HEC Indigenous on Campus Training Workshop on Project Management	02.01.2017
4.	International Workshop on Goat Breeding and Marketing in Genomics Era	06.03.2017 to 07.03.2017
5.	International Seminar on Promotion of Floriculture in Pakistan	06.03.2017 to 07.03.2017
6.	Integrated Weed Management A way to Weed Eradication	07.03.2017
7.	International Seminar on Promotion of Floriculture in Pakistan	07.03.2017 to 08.03.2017
8.	International Training Workshop on Genomics Selection	08.03.2017 to 09.03.2017
9.	Seminar on Academic Integrity and Plagiarism	28.03.2017
10.	3 rd Potohar Art and Literature Festival 2016	29.03.2017 to 31.03.2017
11.	Seminar on Unleash the Power of Goal Setting	04.04.2017
12.	Prospects of Modern Bee keeping in Pakistan	04.04.2017 to 06.04.2017
13.	Seminar on Sustainable Development Goals-Zero Hunger	12.04.2017
14.	Awareness seminar Fruit fly management	25.04.2017
15.	Seminar on Career Counseling	03.05.2017
16.	Seminar on Two Nation Theory and its Relevance	11.05.2017
17.	Seminar on Game Development and Scope in Pakistan	15.05.2017
18.	1 st National Training on Commercial Ostrich Farming	15.05.2017
19.	Training Workshop for Journalist Held at PMAS-AAUR	20.05.2017
20.	Seminar on Transition of Software Quality	23.05.2017
21.	Seminar on Self-Assessment Program: Highlighting the Weaknesses in Self-Assessment Reports	08.06.2017

22.	Seminar on Combating Desertification in Pakistan	13.07.2017
23.	Workshop on ORACLE 11g Database Administration	24.07.2017
24.	Entrepreneurship as Career Option	25.09.2017 to 26.09.2017
25.	3 rd National Training on Commercial Ostrich Farming	27.09.2017
26.	World Rabies Day	29.09.2017
27.	World Food Day Seminar	16.10.2017
28.	NAEAC Team Visited for Evaluation and Accreditation	25.10.2017 to 26.10.2017
29.	Workshop on SQL Fundamentals ORACLE 11g	16.11.2017
30.	International Conference on Tackling Climate Change through Plant Breeding	13.11.2017 to 15.11.2017
31.	Seminar on Time Management for Enhancing Quality in Academics	07.12.2017
32.	Training workshop on the Pathways to Leadership	11.12.2017 to 14.12.2017
33.	3 rd International Seminar on Trans-boundary and Parasitic Diseases 2017	19.12.2017 to 20.12.2017

WORKSHOPS, SEMINARS AND CONFERENCES ATTENDED BY THE FACULTY

INTERNATIONAL

1. Dr. Farida Faisal, Associate Professor, University Institute of Management Sciences attended Final Water Planning Experts Workshop at Daegu, Republic of Korea on April 25-26, 2017.
2. Dr. Mukhtar Ahmed, Assistant Professor, Department of Agronomy attended AgMIP-Wheat & EWG WPCM Workshop at Tongli Lakeview Hotel, Suzhou, China on May 8-11, 2017.
3. Dr. Irfan Aziz, Assistant Professor, Department of Agronomy attended 2nd International Balkan Agriculture Congress at Turkey on May 16-18, 2017.
4. Dr. Muhammad Rais, Assistant Professor, Department of Wildlife Management attended joint meeting of Ichthyologists Herpetologists at Austin, Texas USA on July 12-16, 2017.
5. Dr. Noshin Ilyas, Assistant Professor, Department of Botany attended 5th Asian PGPR Conference for Sustainable Agriculture at Bogor, Indonesia on July 16-19, 2017.
6. Prof. Dr. Arfan Yousaf, Dean, Department of Clinical Sciences attended One Health Research Fellowship in Pakistan. 1st Round Concluding Symposium at Bangkok Thailand on July 23-28, 2017.
7. Dr. Saleem Iqbal, Assistant Professor, University Institute of Information Technology attended 4th International workshop on Applications of ICTs in Education, Health and Agriculture at Nigeria on July 25-27, 2017.
8. Dr. Farid Asif Shaheen, Assistant Professor, Department of Entomology attended International Training Workshop on safe production of Grains at Shenyang Agricultural University, Shenyang, China, on September 11-30, 2017.
9. Dr. Tariq Mahmood, Assistant Professor, Department of Wildlife Management attended ISEEP 2017 VIII International Symposium on Ecology and Environmental Problems at Canakkale, Turkey on October 04-07, 2017.
10. Dr. Abdul Manaf, Assistant Professor, Department of Agronomy attended VIII International Agriculture Symposium AGROSYM 2017 at Bosnia and Herzegovina on October 05-08, 2017.
11. Prof. Dr. Arfan Yousaf, Dean, Department of Clinical Sciences attended Uppsala Health Summit 2017 at Uppsala Castle, Sweden on October 8-12, 2017.
12. Dr. Mazhar Ul Haq Assistant Professor, Department Veterinary Biomedical Sciences attended Uppsala Health Summit 2017 at Uppsala on October 9-12, 2017.
13. Dr. Audil Rashid Assistant Professor, Department of Environmental Sciences attended International Society of Exposure Science 27th Annual Meeting at Durham, North Carolina, USA on October 15-19, 2017.
14. Dr. Beenish Saba Lecturer, Department of Environmental Sciences attended Environmental and Energy Resource Management Summit at Washington DC USA on November 9-11, 2017.
15. Dr. Beenish Saba Lecturer, Department of Environmental Sciences attended International Conference on Environment and Natural Science at Rome Italy on November 20-21, 2017.
16. Dr. Muhammad Javaid Asad, Associate Professor, Institute of Biochemistry and Biotechnology attended 1st Euro Mediterranean conference for Environmental Integration (EMCEI-2017) at Sousse, Tunisia on November 22-26, 2017.

17. Dr. Audil Rashid Assistant Professor, Department of Environmental Sciences attended The Belt and Road Education Dialogue Research, Policy making and Innovation at Beijing, China on November 27-29, 2017.
18. Dr. Farida Faisal, Associate Professor, University Institute of Management Sciences attended The Belt and Road Sino Pakistan Agricultural Forum at Wuhan, China on December 4-8, 2017.
19. Dr. Ghazala Kaukab, Associate Professor, Institute of Biochemistry and Biotechnology attended IDF Congress 2017 at Abu-Dubai, UAE on December 04-08, 2017.
20. Dr. Touqeer Ahmad, Assistant Professor, Department of Horticulture attended 2017 Sino Pakistan Agricultural Forum at Huazhong Agricultural University Wuhan on December 04-08, 2017.
21. Dr. Audil Rashid Assistant Professor, Department of Environmental Sciences attended GEOTRAP 2017- International Conference on Geochemistry in the Tropics & Sub-Tropics at Shenzhen, China on December 09-12, 2017.

NATIONAL

1. Dr. Munir Ahmad, Associate Professor, Department of Entomology attended Science Communion: Enhancing Public Understanding at COMSTECH- Technology on January 10-11, 2017.
2. Dr. Munibullah, Lecturer, Department of Clinical Sciences attended 3rd International Conference on Agriculture, Food and Animal Sciences at Sindh Agriculture University Tandojam, Sindh-Pakistan on January 10-11, 2017.
3. Dr. Muhammad Hasan Ali Baig, Assistant Professor, Institute of Geo-Information & Earth Observation attended First South Asian Regional Sure Conference at Department of Geography, Karachi University on January 18-19, 2017.
4. Prof. Dr. Tariq Masud, Chairman, Dr. Asif Ahmad, Associate Professor, Dr. Asma Sohail, Dr. Rai Muhammad Amir, Assistant Professors, Dr. Kashif S. Abbasi, Muhammad Tauseef Azam, Lecturers attended Food Safety: Our National Responsibility at Institute of Food and Nutritional Sciences, PMAS-AAUR on January 24, 2017.
5. Dr. Ghulam Bilal, Assistant Professor, Department of Livestock of Production and Management attended Micro Teaching: Becoming a Reflective Teacher at Faculty Development Academy, CIIT and Islamabad on January 30 to February 03, 2017.
6. Dr. Abid Ghafoor Chaudhry, Associate Professor, Department of Anthropology attended National Human Rights Policy: National Challenges at Islamabad on February 07, 2017.
7. Dr. Farida Faisal, Associate Professor, University Institute of Management Sciences attended HEC 4th Deans Directors Conference: Business Education and its Context: Points of Convergence and Divergence at Islamabad Marriot Hotel on February 07-08, 2017.
8. Dr. M. Zubair Anjum, Assistant Professor, Department of Zoology/Biology attended 6th International Fisheries Symposium & Expo- 2017 at Faletti's Hotel, Lahore on February 8-9, 2017.
9. Dr. Awais Ur Rahman Sial, Lecturer, Department of Clinical Sciences attended GSDCP-Pakistan Sieger Show-2017 at University of Agriculture Faisalabad on February 11-12, 2017.
10. Dr. Shahid Mahmood, Assistant Professor, Department of Environmental Sciences attended Inception Workshop for REDD+NFMS/MRV/FREL/FRL and REDD+ Strategy Development and Implementation Framework at Hill View Hotel, Islamabad on February 13-14, 2017.

11. Dr. Riaz Hussain Pasha, Assistant Professor, Department of Veterinary Biomedical Sciences attended Participation in National Workshop on the Teaching and Research Techniques in Anatomy at Faisalabad on February 15-16, 2017.
12. Dr. Tanveer Ahmad, Associate Professor, Muhammad Imran Khan Lecturer, Department of Livestock Production and Management attended International Livestock Nutrition Summit at University of Veterinary & Animal Sciences, Lahore on February 21-22, 2017.
13. Dr. Azeem Khalid, Chairman, Department of the Environmental Sciences attended International Conference Bio approaches for Environment and Sustainability NUST Islamabad at National University of Science and Technology (NUST) on February 22-23, 2017.
14. Dr. Tariq Mahmood, Assistant Professor, Department of Wildlife Management and Prof. Dr. Tariq Mukhtar, Department of Plant Pathology attended 37th Congress of Zoology (International) at GC University Faisalabad on February 28 to March 2, 2017.
15. Dr. M. Zubair Anjum, Assistant Professor, Department of Zoology/Biology attended 37th Pakistan Congress of Zoology at Government Collage University, Faisalabad, Pakistan on February 28 to March 2, 2017.
16. Dr. Abida Arshad, Assistant Professor, Department of Zoology/Biology attended Alloimmunization in Multi-transfused Beta Thalassemia Major Patients Visiting Shaheed Zulfikar Ali Bhutto Medical University (PIMS) Hospital, Islamabad at Government College University Faisalabad at February 28 to March 2, 2017.
17. Dr. Awais Ur Rahman Sial, Lecturer, Department of Clinical Sciences attended World Wild Life Day-2017 at Seminar Room, FVS and UAF on March 03, 2017.
18. Prof. Dr. Zammurad Iqbal Ahmed, Department of Agronomy attended International Seminar on Flower Production in Pakistan at PMAS-AAUR on March 06, 2017.
19. Muhammad Imran Khan, Lecturer, Department of Livestock of Production and Management attended Workshop on Goat Breeding and Marketing in Genomic Era at PMAS-AAUR on March 6-7, 2017.
20. All Faculty Members of CS, Department of Clinical Studies attended Workshop on Goat Breeding and Marketing in Genomic Era at University Seminar Room on March 06-07, 2017.
21. Dr. M. Zubair Anjum, Assistant Professor, Department of Zoology/Biology attended The First International Conference on emerging trends in earth and environmental sciences at PMAS-AAUR on March 9-10, 2017.
22. Dr. Abid Ghafoor Chaudhry, Associate Professor, Department of Anthropology attended Human Rights Situation in Pakistan at Islamabad on March 24, 2017.
23. Dr. Munibullah, Lecturer, Department of Clinical Sciences attended train the trainer workshop at Margalla Hotel Islamabad, PBSA on March 26-28, 2017.
24. M. Amin, Lecturer, Institute of Geo- Information & Earth Observation attended National Experts Consultative Workshop on Integrated Water resource management and rain water harvesting in Punjab Barani Tract at PCRWR Islamabad on March 27, 2017.
25. Dr. Rai Muhammad Amir, Assistant Professor, department of Food Technology attended Seminar by CDA Training Academy on March 28-30, 2017.
26. Dr. Munir Ahmad, Associate Professor, Department of Entomology attended Challenges and opportunities to boost agriculture in changing climate at College of Agriculture Sub Campus, Bahadur Pur BZU and Layyah on March 29-30, 2017.

27. Dr. Mukhtar Ahmed, Assistant Professor, Department of Agronomy attended Challenges and Opportunities to Boost Agriculture in Changing Climate at College of Agriculture Bahauddin Zakaria University (BZU), Bahadur Sub campus Layyah on March 29-30, 2017.
28. Dr. Imran Hassan, Assistant Professor, Department of Horticulture attended Influence of Mitigation measure and Planting time on Growth at Flower Production Gladiolus at Bahadur Campus Distt. Layyah on March 29-30, 2017.
29. Dr. Ghulam Abbas Shah, Assistant Professor, Department of Agronomy attended National conference on challenges and opportunities to boost agriculture in changing climate at BZU, Bahadur sub campus Layyah on March 29-30, 2017.
30. Dr. Abid Ghafoor Chaudhry, Associate Professor, Department of Anthropology attended International Aging Index at Islamabad on April 03, 2017.
31. Ms. Mahwish Zeeshan, Lecturer, Department of Anthropology attended Causes and Consequences of HIV/AIDS at Malakand on April 05, 2017.
32. Dr. Abid Ghafoor Chaudhry, Associate Professor, Department of Anthropology attended BS Program on Anthropology at Islamabad on April 12, 2017.
33. Dr. Farida Faisal, Associate Professor, University Institute of Management Sciences attended Aligning Business with Sustainable Development Challenges and Responsibilities for the industry at Islamabad Campus SZABIST on April 19, 2017.
34. Dr. Muhammad Rais, Assistant Professor, Department of Wildlife Management attended 1st International Conference on Climate Change on Biodiversity at Cholistan Institute of Desert Studies and Islamia University of Bahawalpur on May 02-04, 2017.
35. Dr. Abid Ghafoor Chaudhry, Associate Professor, Department of Anthropology attended Shrine as a spiritual Nexus between believers and Allah in Pothohari Communities at Jamsharo University on May 5-6, 2017.
36. Prof. Dr. Maqsood Anwar, Department of Wildlife Management attended 1st Climate Change and Biodiversity at Cholistan Institute of Desert Studies, Islamia University Bahawalpur on May 02-04, 2017.
37. Ammar Asghar, Lecturer, University Institute of Management Sciences attended Trainer Seminar on Financial Planning and Investment at Islamabad Marriot Hotel on May 08-09, 2017.
38. M. Aleem Akhter, Lecturer, University Institute of Management Sciences attended Financial Planning and Investment at Islamabad Marriot Hotel on May 08-09, 2017.
39. Prof. Dr. Tariq Mukhtar, Department of Plant Pathology attended 6th International and 15th National Conference on Dynamic Trends in Plant Sciences Fostering Environment and Food Security at Sardar Bahadur Khan Women's University in collaboration with Pakistan Botanical Society on May 9-11, 2017.
40. Dr. Rahmatullah Qureshi, Associate Professor, Department of Botany attended 6th International and 15th National conference of Botany at Sardar Bahadur Khan Women's University, Quetta on May 09-11, 2017.
41. Dr. M. Sheeraz Ahmad, Assistant Professor, Institute of Biochemistry and Biotechnology attended 15th National & 6th International Conference of Botany "Dynamic Trends in Plant Sciences: Fostering Environment and Food Security" Pakistan Botanical Society (PBS) at Sardar Bahadur Khan Women's University, Quetta, Pakistan on May 09-11, 2017.
42. Dr. Imran Hassan, Assistant Professor, Department of Horticulture attended National Conference on Agri- Business on CPEC at Pearl Continent on May 10, 2017.

43. Dr. Ghulam Bilal, Assistant Professor, Department of Livestock of Production and Management attended National Seminar on Development of dual purpose chicken breed for rural poultry sector of Pakistan at NARC Islamabad on May 15, 2017.
44. Muhammad Imran Khan, Lecturer, Department of Livestock Production and Management attended Commercial Ostrich Farming at PMAS-AAUR on May 15-17, 2017.
45. Prof. Dr. Arfan Yousaf, Dean, Dr. Munibullah, Lecturer, Department of Clinical Sciences attended 1st National Training Commercial Ostrich Farming at University Seminar Room (KOICA Center) on May 15-19, 2017.
46. All Members of the department, Department of Pathobiology attended 1st National Training on Commercial Ostrich Farming at University Seminar Room (KOICA Center) on May 15-19, 2017.
47. Dr. Abid Ghafoor Chaudhry, Associate Professor, Department of Anthropology attended Launching of State of Pakistan, Children at Islamabad on May 19, 2017.
48. Dr. Rahmatullah Qureshi, Associate Professor, Department of Botany attended International Biodiversity day at Pakistan Museum of Natural History on May 22, 2017.
49. Dr. Muhammad Rais, Assistant Professor, Department of Wildlife Management attended 1st Young Researchers National Conference at Mehran University of Engineering and Technology Jamshoro, Sindh on May 22-23, 2017.
50. Dr. Muhammad Arif Zafar, Associate Professor, Department of Clinical Sciences attended Trainer speaker at livestock officers training course at NCRD Preservation of Natural Resources at National Centre for Rural Development, Islamabad (NCRD) on May 23, 2017.
51. Dr. Munibullah, Lecturer, Department of Clinical Sciences attended Presenter Certificate at three day training workshop on livestock Management for rural areas for Income Generation at National Centre for Rural Development, Islamabad (NCRD) on May 23, 2017.
52. Dr. Ghulam Bilal, Assistant Professor, Department of Livestock Production and Management attended Capacity Building Training of Veterinary Officers/ Veterinary Assistants under Development Project Conversion, Propagation and Development of Dhanni, Lohani and Dajal Breeds of cattle in Punjab on May 24, 2017.
53. Dr. Azeem Khalid, Chairman and Dr. Shahid Mahmood Assistant Professor, Department of Environmental Sciences attended Connecting People to Nature; in the Cities, on the Land; from the Poles, to the Equator at Mashhadi Hall, Pakistan Engineering Congress Headquarter on June 05, 2017.
54. Ms. Najma Yousaf Zahid, Assistant Professor, Department of Horticulture attended Self Assessment Program: High lightness weakness in self assessment report at PMAS-AAUR on June 08, 2017.
55. Dr. Abid Ghafoor Chaudhry, Associate Professor, Department of Anthropology attended Meeting Aging Challenges: Community Responsibilities at Islamabad on June 30, 2017.
56. Prof. Dr. Maqsood Anwar, Chairman, Department of Wildlife Management attended Combating desertification in Pakistan at PMAS Arid Agriculture University Rawalpindi on July 13, 2017.
57. Kaleem-Ullah, Lecturer, University Institute of Management Sciences attended Change in Behavior at CDA Training Academy on July 18-20, 2017.
58. Dr. Abid Ghafoor Chaudhry, Associate Professor, Department of Anthropology attended Sensitization workshop on Community Based Services on Human Rights at Islamabad on July 20, 2017.
59. Dr. Farida Faisal, Associate Professor, University Institute of Management Sciences attended All Pakistan Chambers Committee on CPEC at Rawalpindi Chamber of Commerce and Industry on July 20, 2017.

60. Dr. Abida Akram, Associate Professor, Department of Botany attended Emerging trends in bioinformatics & biosciences at Hazara University, Mansehra KPK on July 20-22, 2017.
61. Dr. Rahmatullah Qureshi, Associate Professor, Department of Botany attended 3rd International Symposium Conservation Issues of Edible Wild Resources of Hindukush Himalayas at jointly organized by the Department of Botany, Islamia College Peshawar & University of Peshawar on July 21-24, 2017.
62. Dr. Munibullah, Lecturer, Department of Clinical Sciences attended Margalla Hotel Islamabad on July 29 to August 03, 2017.
63. Dr. Mansur Abdullah, Dr. Riaz Hussain Pasha, Assistant Professors, Department of Veterinary Biomedical Sciences attended Participation in 2nd National Training on Commercial Ostrich Farming Sub Theme Ostrich Diseases and Health held on at PMAS-AAUR on August 02-03, 2017
64. Prof. Dr. Arfan Yousaf, Dean, Dr. Zahid Naseer, Dr. Munibullah, Lecturers, Department of Clinical Sciences attended 2nd National Training on Commercial Ostrich Farming at University Seminar Room (KOICA Center) on August 02-03, 2017.
65. Muhammad Imran Khan, Lecturer, Department of Livestock Production and Management attended Commercial Ostrich Farming sub theme Ostrich Diseases and Health at PMAS-AAUR on August 03.2017.
66. Dr. Tanveer Ahmad, Associate Professor, Department of Livestock Production and Management attended 7th International Conference on Biotechnology and Bioengineering 2017, Intl Conf on Agriculture and Food Sciences at Virtual University, Lahore on August 25-27, 2017.
67. Dr. Muhammad Hasan Ali Baig, Assistant Professor, Institute of Geo Information & Earth Observation attended Wet land change detection in protected and unprotected Indus Coastal and inland delta. CHGCS 2017, ISPRS at Wuhan, China on September 18-22, 2017.
68. Dr. Abid Ghafoor Chaudhry, Associate Professor, Department of Anthropology attended Lecture of Aging in Pakistan Issues & Challenges at Islamabad on September 22, 2017.
69. Dr. Muhammad Hasan Ali Baig, Assistant Professor, Institute of Geo Information & Earth Observation attended Research Collaboration at Institute of Remote Sensing and Digital Earth (RADI), Chinese Academy of Sciences on September 23-29, 2017.
70. M. Aleem Akhter, Lecturer, University Institute of Management Sciences attended NBEAC at Islamabad Club on September 25-26, 2017.
71. Muhammad Imran Khan, Lecturer, Department of Livestock Production and Management attended Commercial Ostrich Farming sub theme Ostrich Nutrition and Feed Formulation at PMAS-AAUR on September 26-27, 2017.
72. Prof. Dr. Arfan Yousaf, Dean, Dr. Munibullah, Lecturer, Department of Clinical Sciences attended 3rd National Training on Commercial Ostrich Farming at University Seminar Room (KOICA Center) on September 26-27, 2017.
73. All Members of the department, Department of Pathobiology attended 3rd National Training on Commercial Ostrich Farming at University Seminar Room (KOICA Center) on September 26-27, 2017.
74. Dr. Feroza Hamid Wattoo, Assistant Professor, Institute of Biochemistry and Biotechnology attended Health Challenges of modern life and treating with functional foods and life style/ dietary modification at Pakistan Science Foundation on September 27, 2017.
75. All faculty members of CS, department of Clinical Studies attended World Rabies Day at University Seminar Room on September 29, 2017.

76. Prof. Dr. M. Naeem, Department of Entomology attended Evaluators of NAEAC at Margallah Hotel, Islamabad on September 28-30, 2017.
77. Ms. Najma Yousaf Zahid, Assistant Professor, Department of Horticulture attended delivered a Lecture on Kitchen Gardening at Serena Hotel on October 07, 2017.
78. All Members of the department, Department of Pathobiology and All Faculty Members of CS attended World Egg Day at University Auditorium on October 13th, 2017.
79. Ms. Mahwish Zeeshan, Lecturer, Department of Anthropology attended National Dialogue on Secure and Dignified old age for all: Older people inclusive Social Protection for Pakistan at Islamabad on October 16, 2017.
80. Prof. Dr. Tariq Masud, Chairman, Dr. Asif Ahmad, Associate Professor, Dr. Asma Sohail, Dr. Rai Muhammad Amir, Assistant Professors, Dr. Kashif S. Abbasi, Muhammad Tauseef, Lecturers attended World Food Day Seminar at PMAS-AAUR on October 16, 2017.
81. M. Amin, Lecturer, Institute of Geo- Information & Earth Observation attended Collect Earth for Land Monitoring and Project Evaluation, A free and open source approach at FAO Head Office NARC premises on October 19, 2017.
82. Prof. Dr. Maqsood Anwar, Chairman, Department of Wildlife Management attended International Snow Leopard Day –Snow Leopard Conservation for a Resilient Mountain Ecosystem on Serena Hotel Islamabad on October 23, 2017.
83. Dr. Zia-Ur-Rehman Mashwani, Assistant Professor, Department of Botany attended Kigali Amendment- The way forward at Marriot, Islamabad on October 25, 2017.
84. Dr. Rahmatullah Qureshi, Associate Professor, Department of Botany attended three days International Pakistan Research Summit on Advances in Physics at Pakistan Institute of Engineering and Applied Sciences, Islamabad on October 24-26, 2017.
85. Dr. Muhammad Javaid Asad, Associate Professor, Institute of Biochemistry and Biotechnology attended 7th International Conference on Biotechnology and Bioengineering (ICBB- 2017) at UV-Campus Lahore on October 24-28, 2017.
86. Kaleem-Ullah, Lecturer, University Institute of Management Sciences attended Workshop on Envivo at Islamia College Peshawar on November 11, 2017.
87. Dr. Mukhtar Ahmed, Assistant Professor, Department of Agronomy attended International Conference on Tackling Climate Change through Plant Breeding at PMAS-AAUR on November 13-15, 2017.
88. Prof. Dr. M. Kausar Nawaz Shah, Dr. Zahid Akram, Dr. Nasir M. Minhas, Dr. Ghulam Shabbir Associate Professors, Dr. Talat Mahmood, Dr. Saad Imran Malik, Dr. Munir Ahmad, Dr. Rashid Mahmood, Dr. Mahmood Ul Hassan, Assistant Professors, Dr. Fahad Masood Wattoo Lecturers, Department of Plant Breeding and Genetics attended International Conference on Tackling Climate Change through Plant Breeding at PMAS-AAUR on November 13-15, 2017.
89. Dr. M. Asif Aziz, Assistant Professor, Department of Entomology attended International Conference on Tackling Climate Change through Plant Breeding at Auditorium PMAS-AAUR on November 13-15, 2017.
90. Prof. Dr. M. Inam-ul-Haq, Department of Plant Pathology attended International Conference on Tackling Climate Change through Plant Breeding at Department of Plant Breeding & Genetics, PMAS-AAUR on November 13-15, 2017.
91. Dr. Rai Muhammad Amir, Assistant Professor, Dr. Kashif S. Abbasi, lecturer, Institute of Food & Nutritional Sciences attended International Conference on Tackling Climate Change through plant breeding at Department of Plant Breeding and Genetics, PMAS-AAUR on November 13-15, 2017.

92. Ms. Mahwish Zeeshan, Lecturer, Department of Anthropology attended Migration & Displacement at G.C. Lahore on November 14, 2017.
93. Ms. Mahwish Zeeshan, Lecturer, Department of Anthropology attended Gender Role & Irresponsibilities; A case study of women with mall migration at Mirpur Azad Kashmir on November 14-15, 2017.
94. Muhammad Usman Raja, Assistant Professor, Department of Plant Pathology attended Tackling Climate Change through Plant Breeding at Department of Plant Breeding & Genetics, PMAS-AAUR on November 13-15, 2017.
95. Prof. Dr. Nadeem Akhtar Abbasi, Dean and Prof. Dr. Ishfaq Ahmad Hafiz Chairman, Department of Horticulture attended Tackling Climate Change through Plant Breeding and Genetics at University Seminar Room on November 13-15, 2017.
96. Ms. Mahwish Zeeshan, Lecturer, Department of Anthropology attended Occupational shift amongst fisherman; a case study of fishing community in district Larkana at Jamsharo University on November 20-21, 2017.
97. Dr. Feroza Hamid Wattoo, Assistant Professor, Institute of Biochemistry and Biotechnology attended 3rd International Nano medicine Symposium. "Nanotheranotics: The power of Nanomedicine" at COMSTECH Islamabad on November 21, 2017.
98. Prof. Dr. Abdul Rauf, Department of Plant Pathology attended 6th International Conference of Plant Phytopathological Society (6th ICPPS) Plant Health for Sustainable Agriculture at Department of Palnt Pathology, Bahauddin, Multan & Central Cotton Research Institute Multan on November 20-22, 2017.
99. Dr. Farah Naz, Dr. Gulshan Irshad, Assistant Professors, Department of Plant Pathology attended Plant health for sustainable Agriculture at Department of Plant Pathology, Bahaudin Zakariya University (BZU), Multan on November 20-22, 2017.
100. Prof. Dr. Tariq Mukhtar, Department of Plant Pathology attended 6th International Conference of Pakistan Phytopathological Society on Plant Health for Sustainable Agriculture at Department of Plant Pathology, Bahauddin Zakaria University, Multan & Central Cotton Research Institute, Multan on November 20-22, 2017.
101. Dr. Mukhtar Ahmed, Assistant Professor, Department of Agronomy attended International Conference on Climate Change threats to Agriculture and Food security, Think-Adapt at The University of Agriculture Peshawar, Pakistan on November 22-24, 2017.
102. Dr. Badar Naseem Siddiqui, Associate Professor, Department of Agricultural Extension attended Innovative trends in Agricultural Science: Way forward to Sustainable Development at Sargodha on November 22-24, 2017.
103. Prof. Dr. M. Naeem, Department of Entomology attended International Symposium Innovative Trends in Agricultural Sciences: Way Forward to Sustainable Development at Faculty of Agriculture, University of Sargodha on November 23-25, 2017.
104. Prof. Dr. Tariq Mukhtar, Department of Plant Pathology attended 1st International Conference on Conventional and modern approaches in plant sciences (CMAPS-2017) at Department of Botany, University of the Punjab Pakistan on November 27-29, 2017.
105. Dr. Abida Akram, Associate Professor, Department of Botany attended Conventional and Modern approaches in Plant Sciences (CMAPS-17) at University of the Punjab, Lahore on November 28-29, 2017.

106. Dr. Munibullah, Dr. Asghar Khan, Lecturers, Department of Clinical Sciences attended two weeks Faculty Training Program on Veterinary Clinical Procedures in Large and Small Animals at University of Veterinary and Animal Sciences Lahore, on December 04-15, 2017.
107. Dr. Azeem Khalid, Chairman, Department of Environmental Sciences attended Training Workshop for the Editors of Agricultural Sciences Journals at Higher Education Commission on December 06, 2017.
108. Ms. Mahwish Zeeshan, Lecturer, Department of Anthropology attended Time Management for enhancing Quality in Academies at PMAS-AAUR on December 07, 2017.
109. Dr. Tariq Mahmood, Assistant Professor, Department of Wildlife Management attended First International Conference on Emerging Trends in Zoology at University of Sargodha, on December 08-09, 2017.
110. Prof. Dr. Maqsood Anwar, Department of Wildlife Management attended 1st International Conference on Emerging Trends in Zoology at Department of Zoology University of Sargodha on December 08-09, 2017.
111. Dr. Muhammad Rais, Assistant Professor, Department of Wildlife Management attended 1st International Conference on Emerging Trends in Zoology at University of Sargodha on December 08-09, 2017.
112. Ms. Mahwish Zeeshan, Lecturer, Department of Anthropology attended Workshop Department of Anthropology organized one day awareness workshop on Aging in of human rights on International Human Rights day at Lok versa on December 10, 2017.
113. Dr. Munibullah, Dr. Asghar Khan, Lecturers, Department of Clinical Sciences attended One Week Faculty Training program on Advance Veterinary Surgical and Clinical Skills at Riphah College of Veterinary Sciences, Lahore on December 11-15, 2017.
114. Dr. Muhammad Rais, Assistant Professor, Department of Wildlife Management attended 5th Conference of Biology and Computer Sciences at Capital University of Science and Technology, Islamabad on December 14, 2017.
115. Dr. Noshin Ilyas, Assistant Professor, Department of Botany attended 5th Conference on Biological and Computational Sciences (C-BICS 2017) at CUST on December 14, 2017.
116. Ms. Mahwish Zeeshan, Lecturer, Department of Anthropology attended Rationale of youngster behind sharing post on a social networking site at IC at Virtual University on December 14-16, 2017.
117. Dr. Ghulam Abbas Shah, Assistant Professor, Department of Agronomy attended DICE Mega Innovation & Entrepreneurship Event 2017 at Mirpur University of Science & Technology Mirpur AJ&K on December 18-19, 2017.
118. All Members of the department, Department of Pathobiology attended 3rd International Seminar on Transboundary and Parasitic Diseases 2017 at University Seminar Room + KOICA Seminar Room on December 19-20, 2017.
119. Prof. Dr. Ali Abdullah Shah, Chairman, Department of Pathobiology attended 3rd International Seminar on Transboundary and Parasitic Diseases 2017 at University Seminar Room + KOICA Seminar Room on December 19-20, 2017.
120. M. Amin, Lecturer, Institute of Geo- Information & Earth Observation attended Technical Training Workshop on Agro-Ecological Zone of Punjab at UAF on December 18-23, 2017.
121. Dr. Abid Ghafoor Chaudhry, Associate Professor, Department of Anthropology attended Rights of Persons Disabilities at Islamabad on December 20, 2017.

122. Ms. Mahwish Zeeshan, Lecturer, Department of Anthropology attended Rights of Persons Disabilities at Islamabad on December 20, 2017.
123. Dr. Noshin Ilyas, Assistant Professor, Department of Botany attended Science Policy Conference on Climate Change 2017(SP3C) at Marriot Hotel on December 25-27, 2017.

COMPOSED & DESIGNED BY:

**MUHAMMAD SAQIB ABBASI
(ORIC)**

COMPILED & EDITED BY:

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