



SUSTAINABLE
DEVELOPMENT
GOALS



***SDG
ANNUAL REPORT
2022***

AIR UNIVERSITY
SUSTAINABLE DEVELOPMENT GOALS

A MESSAGE FROM OUR VICE CHANCELLOR



AIR MARSHAL JAVAID AHMED,
HI(M) (RETD)

It is an honour to serve as the Vice Chancellor of Air University, a thriving hub of academic excellence with a culture of research and innovation and a strong commitment to concept-based learning. Our highly trained faculty and staff provide a conducive environment for efficient and knowledge-driven pursuit of higher education objectives. With nation-building as our focus, we embrace and cherish our responsibility as a leading university of Pakistan, to produce professionals with the knowledge, skills and opportunities to materialise United Nations' 17 Sustainable Development Goals (SDGs). Our faculty, staff, and students are working diligently to incorporate these SDGs into their work to promote economic prosperity, social inclusion, environmental sustainability, and good governance. We are pursuing technologies, innovations, and evidence-based knowledge to generate solutions and pathways for implementation of these SDGs. Today, we are excited by the recognition of our efforts in the Impact Rankings 2022 which place Air University at the ___ position in Pakistan and ___ position internationally, for implementation of the UN SDGs. To that end, I invite the brilliant minds of Pakistan to join us in our endeavours to make a positive contribution to the future of Pakistan."

It has been discovered during the past few years that the world has begun to institutionalize sustainable development, community engagement in energy and climate, water conservation, transportation, and research and education programs into their systems or operational procedures. By combining social and environmental dynamics into the decision-making processes, it is more likely to build a sustainable operational framework that is substantial to the environment. The UN Sustainable Development Goals have established standards for all international institutions to embrace best practices and offer a course for the best application of the plans in the future. In order to develop a strong culture of sustainable development goals and successfully achieve all indicators to globally deal with all networks who are highly involved to make this target achievable, the AU Quality Enhancement Cell is responsible for promoting higher standards of education, research, innovation, teaching, and adoption of new technologies and methods with the collaboration of the concerned departments in the University in accordance with the national agenda for pursuing the UN 17 X SDGs. In this report, we list a few of the numerous initiatives our university is involved in to help the SDGs be achieved. We are unable to fully describe the outstanding work done by our staff, students, and collaborative partners in the areas of social participation and contribution, performance assessment, student learning, and academic excellence and research. As an appreciation of the many initiatives taking place inside the University, we have instead chosen to highlight a few of them here. These activities notably show our dedication to sustainability and our role in ensuring a more sustainable future for everybody.

A MESSAGE FROM AU DIRECTOR QUALITY ENHANCEMENT CELL



AIR CDRE (R) AHMED HASSAN



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1 NO POVERTY



END POVERTY IN ALL ITS FORMS EVERYWHERE

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FYP

Social Contribution & Participation

Air University has established its own student support center that plays a significant role in both academic advising and career counseling. Additionally, the center hosts leadership workshops for students to help them discover their potential.

Air University has its own student community group and student clubs that assist the less fortunate students in overcoming their obstacles and organize workshops and training sessions with the support of the department of student affairs. It has no specific barriers for any ethnic group, and everyone is welcome to join and benefit from its perks. It is extremely interested in austerity measures. It forbids any student from placing value on financial possessions above others who cannot afford them and does not accept the division of society into social classes. It believes that by providing every student, regardless of background, with the greatest education possible benefits.



Research Analysis

Air University provides financial support to underprivileged, rural students who possess exceptional talent but are unable to pursue further education due to financial constraints.

Enabling our students to receive a modern education using the most up-to-date technological resources, advancing university research, and assisting them in obtaining the finest employment possibilities for a bright future. In order to solve the concerns of those students who are unable to satisfy their financial obligations and receive a better education, it has set up its own online learning management system. The ultimate goal of this effort is to combat gender inequality and prejudice in rural and urban areas and develop a comprehensive culture.



Performance Assessment

(Scholarship and Financial Aid support)

AU Sponsored MS & Ph.D. Programs

AU pays back to society through Graduate Research Initiative Program. This program enables the students to take on professional challenges for excellent leadership careers in academia and industry.

Educate to Innovate Scholarship Scheme (Only for MS Information Security and MS Avionics Engg)

This scheme offers Full and Partial fee waiver to students with bright academic record.

AU Need-Based Financial Grant

Through this scheme, AU funds each semester needy students who face financial constraints ranging from 25% to 100% of tuition fee discounts

AU Merit-Based Scholarship

Air University offers Merit-based scholarships to all outstanding students enrolled in different undergraduate and graduate programs based on their semester results

PAF Ward concession & AU Employee Concession

AU grants 25% tuition fee discount to PAF Wards and 50% discount to AU Employees and their wards

Ehsaas Undergraduate Scholarship Project (EUSP)

Students with combined family income $\leq 45,000$ per month can apply for this scholarship at HEC portal and the scheme is announced every year.

Fazaia Educations Welfare Scheme (FEWS)

Other than 25% Tuition Fee discount PAF Wards studying at AU campuses can avail additional funding from FEWS ranging from 25% to 100%. They can also apply for Qarz-e-Hasana from FEWS.

Punjab Education Endowment Fund Scheme (PEEF)

This scheme offers AU students avail 50% of Tuition Fee discount in each semester through PEEF as per the laid down criteria set by the Punjab Govt to sponsor the higher education of deserving students.

PM Tuition Fee Reimbursement Scheme

Through this scheme students hailing from the less developed areas of Pakistan (Selected areas) can avail of funding opportunities at the Graduate and Postgraduate level from the Higher Education Commission (HEC).

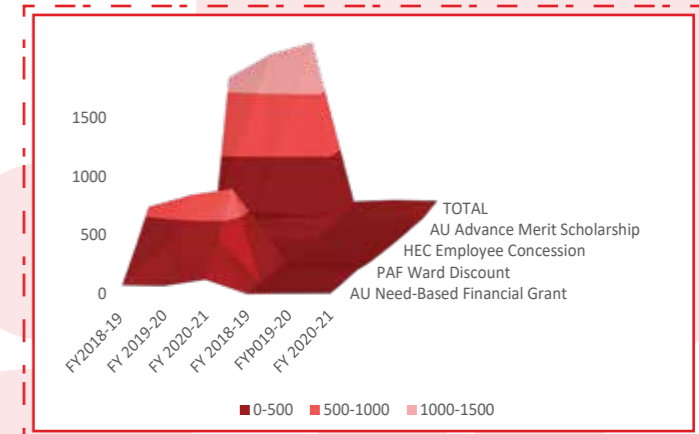
Student Learning & Academic Excellence

Out of 8000 students, more than 4000 students from low-income households received financial aid from Air University Islamabad over the past three years.

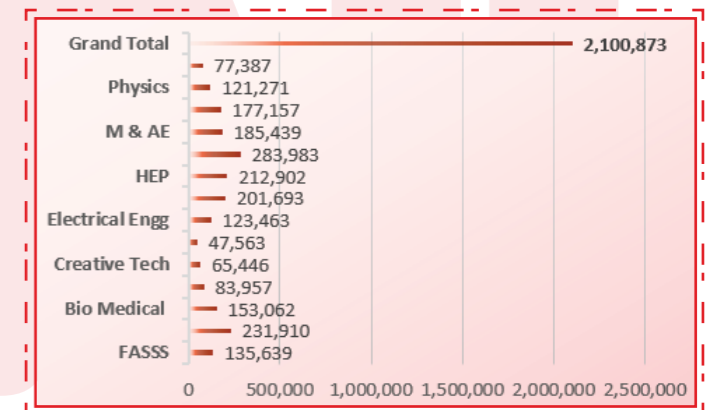
The University has set a goal of providing low-income students with all of the scholarships offered through these programs. All of the students in this category who get financial aid ultimately earn a university degree. For the purpose of retaining their scholarships, students are expected to maintain a 3.00 CGPA or above during their studies for the continuation of scholarships.



Scholarship /Financial Aid Data



Annual Expenditure on Each Student



2 ZERO HUNGER



END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

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FYP

Social Contribution & Participation

Air University Flood Donation Campaign

The unprecedented rains and floods in Pakistan caused devastation in various parts of the country on 26 August 2022. The Government of Pakistan has declared a state of emergency in view of huge losses of life, property, infrastructure, livestock, and livelihoods. 33 million people have been affected by 1000 lives have been lost. The Directorate of Student Affairs at Air University has established the Flood Donation Campaign to accept donations/contributions; food items/rations, water bottles, medicines, clothes, etc. for the victims.



Research Analysis

Food Waste Reduction

The Air University has built its own task force for university food security, where all the stakeholders are allowed to voluntarily identify the advantages and disadvantages of the University's food administration for its faculty, staff, and students.

Food management behavior should be promoted socially, as this will create a community of practice that will further encourage people to adhere to social norms and a sense of community that encourages people to engage in food management behaviors.

Performance Assessment



Air University Food Management Policy

Air University Food Management Policy is responsible for food service administration on campus. This specifically involves negotiating and implementing all food service contracts and ensuring policy compliance. Air University has established a food management committee who are responsible for complying with the requirements of the food management.

All food supplied by or delivered to the University is produced, stored, handled, and transported in accordance with relevant legislative requirements; All catering providers using the University premises are registered and approved by the University to ensure food safety standards are met and maintained and the risks associated with the provision of food and beverages are reduced to a tolerable level.

Air University Cafeteria

In order to better serve its students, teachers, and staff, Air University has developed two and three cafeterias on its various campuses. These cafeterias provide an inexpensive range of goods to satisfy individual needs. It is kept under the direction of the university's administration division.



Student Learning & Academic Excellence

Food Management Awareness

The Air University department has incorporated this initiative to educate students about food waste management and the consequences of improper organization with the help of the student affairs department. In the past three years, numerous workshops and activities have been held to raise awareness about the nation's food security as well as that inside the university's boundaries.

Air University has made its own shoor society for the students the main priorities of the Shoor Society are the development of sustainable goals and other fundamental needs. They organized a campaign to inform students of the purpose of the plantation effort and the necessity to raise awareness among the students and community. 200 plants were planted by the Air University Shoor Society as part of an effort to safeguard the environment from ozone depletion and the impact it has on agriculture and livestock, which has a significant relationship with food security.



Food Management Feedback System

Air University has asked all departments, staff members, professors, and students for their feedback on how to improve the caliber of the meals. At the end of each month, a feedback form is given out in order to gather information regarding customer satisfaction and the performance of the food contractors. More than 6000 of the 8,000 students in our study expressed satisfaction with the food's hygienic conditions, and 85% of the faculty and staff expressed high levels of satisfaction.



3 GOOD HEALTH AND WELL-BEING



ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

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Social Contribution & Participation

Collaborations with local or global health institutions to improve health & wellbeing outcomes

Our students of Fazaia Medical College (FMC) have joined organizations like SYNCH (Solidarity among Young Nations for Change). More than 40 medical colleges all over Pakistan are part of this society and their focus is on health, education, medical research, and welfare work. This society is working in collaboration with multiple national and internationally renowned organizations like WHO.

National and international medical Workshop and associations

Fazaia Medical College is arranging seminars, conferences, and day commemoration of international days with the collaboration of UNICEF, WHO, and the Ministry of health and coordination on reproductive and maternal health, communicable and non-communicable diseases (like Tuberculosis and cancers), immunization, breastfeeding and also working with the Scaling up nutrition (SUN) academia and research network.



Blood Donation Campaign

Air University has made its own blood donation group which helps to provide blood in the twin cities of Pakistan and its subcampuses are collaborated with Thalassemia International Federation and Sundas Foundation, Regional Blood Center and Safe Blood Transfusion Services (Hemophilia and Thalassemia Center).



Digital mental health intervention at the community level

The Well Park project, supported by the German Federal Ministry of Education and Research, has been launched by the Fazaia Medical College to promote good health in all of Pakistan's urban and rural areas.



Research Analysis

Contamination of Mobile Phones of Health Care Workers of PIMS Hospital Islamabad

The Constituent College of Air University, known as Fazaia Medical College, discovered that mobile phones were extremely polluted with bacteria. A consistent guideline regarding the cleanliness practices of electronic devices and mobile phones in hospitals and healthcare facilities should be released because this could result in nosocomial infections. Our university has developed a standard operating procedure that is displayed throughout the university's main buildings.

Knowledge, Attitude, Risk Factors & Screening Practices Regarding Breast Cancer

The community medicine department of the Fazaia medical college, a constituent college of Air University Pakistan is very eager to raise awareness of breast cancer among both men and women, although it is relatively high among females. The department of Community Medicine urged the entire month of October to be devoted to raising awareness about breast cancer

Performance Assessment

Holistic Health Facilities

Air University provides health facilities to staff, students, and faculty members on campus ambulance health insurance card facilities for major injuries and incidents which helps to carry patients to the hospital. It has a 600 bedded teaching hospital affiliated with Fazaia Medical College.

Sports Participation Physical and Mental Fitness

The Sports Department of Air university is well equipped with sports gear for the training of Intervarsity sports events. It has a team of qualified and dedicated sports staff who is highly experienced with the methods of systematic sports and physical training.

AU Fitness Centre

Air University constructed a fitness center with commercial Treadmills, sit-up benches, Olympic flat benches, Leg press machines, other equipment to promote healthy settings.

Student Learning & Academic Excellence

AU Policy for Differently abled students

Because AU University believes in offering equal opportunities to all students, it has established a policy for differently abled students to ensure that they are treated equally.



Student Psychological counseling

Air University has established a Student Psychological counseling policy to safeguard students' well-being and to address their emotional, physical, and moral difficulties timely. A trained full-time clinical psychologist is hired for this purpose.



4 QUALITY EDUCATION



ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG OPPORTUNITIES FOR ALL

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Social Contribution & Participation

CPEC Center of Excellence at Air University School of Management

It aims to understand how the contribution of Export Processing Zones EPZs toward human welfare, in the post-CPEC scenario, can be maximized in Pakistan. Export Processing Zones (EPZs) will have significant implications not only for the economy of Pakistan but also for the economy of the whole globe



National Centre for Cyber Security (NCCS) Air University Islamabad

It will create a significant impact on Cyber Security Research and Development in Pakistan and promote the R&D Culture in specialized areas of Cyber Security.

Office of Research, Innovation, and Commercialization (ORIC)

ORIC has self-adopted its mandate to enhance the environment for all research activities and scholarship schemes by developing the university's strategic research directions and policies. Increasing and diversifying external research funding.

International Cooperation Office (ICO)

Through this network, more than 200 students have been sent to study abroad on scholarships to receive the greatest education possible.

Research Journals Forums

Air University has partnered with these journals to give its students the chance to publish high-quality papers in the Journal of Business & Economics, Journal for graduate research Erevna: Journal of Linguistics, and Literature corporum: journal of corpus linguistics

Strengthening Internal Quality

The QEC department had conducted three days workshops for the 36 36 participants from 23 Universities to discuss the way forward for improving the quality education, teaching methodology, academic performance and research



Research Analysis

Identifying and addressing Challenges in Quality Education

The Air University Islamabad's humanities, education, and psychology department have worked hard in the field of quality education to strengthen the weak areas and establish benchmarks to learn about the students' perceptions of novice instructors' and experienced teachers' instructional competency.

Awareness Regarding Environmental Education: Steps in Education Leading to a Green Pakistan

Teaching students about ecology is not enough; they also need to participate in a curriculum that enables them to understand how they interact with the environment. Therefore, sustainable courses have been added to the curriculum to assist students in learning about the specifics of climate change, its effects, and what kind of actionable efforts may be made to safeguard the university from the problems posed by global warming.

Performance Assessment



Our Academics

Air University has different departments to run the academic undergraduate and postgraduate programs and ensure that it should meet the criteria of national and international standards. These departments range from engineering and medical to business and art studies. Our university is offering more than 700 courses and more than 70 programs in vast disciplines

Research Workshops

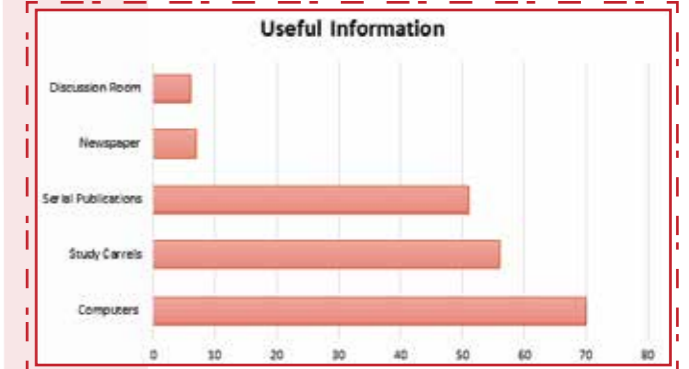
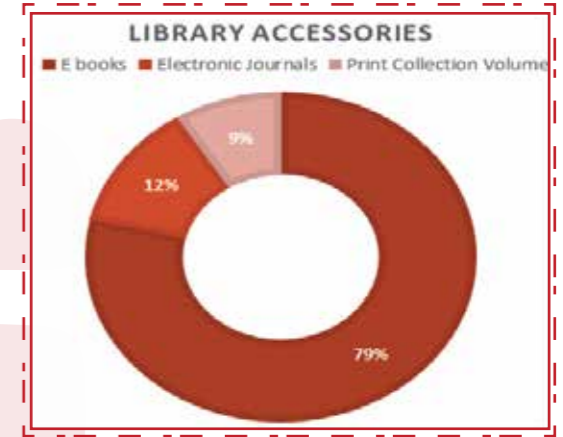
Students are provided an opportunity to augment their learning through practical work in the modern laboratories of all engineering departments. These labs are adaptable, reconfigurable and modular, making them ideally suited for undergraduate teaching in a wide range of fields.

Computing rooms

We provide high-quality IT services to University students, faculty, and staff members. We have Fifteen (15) computer labs and one (1) language lab which is equipped with 510 high specs desktop computers.

Library Access to students

The Air University Central Library aims to enrich the learning, teaching, and research Programs of the University by providing timely access to high-quality scholarly information and learning material in a variety of formats.



Student Learning & Academic Excellence

Learning Management System

A learning management system is a software application for the administration, documentation, tracking, reporting, automation, and delivery of educational courses. There are 4 integrated modules on LMS i.e MS Dashboard, LMS Students, Class Room and IT Helpdesk Services

Sustainable Course in Curriculum

Air University's curriculum includes 658 sustainable educational courses designed to help students expand their potential and study more effectively and provided the US \$ 64,710,949 in sustainable research funds. It has a total average per annum over the last 3 years of 30303.

Student and Faculty Feedback Mechanism

All faculty members and students are required to conduct course and faculty evaluations periodically. The teacher's evaluation is done at the end of each semester through student feedback and the performance of each faculty member is shared with the Deans and the Chair department which is disseminated to respective faculty members. On the basis of input from the Chair department, QEC organizes Professional Competency Enhancement Program for the Teachers (PCEPT) during summer vacations to improve teaching skills

5 GENDER EQUALITY



ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

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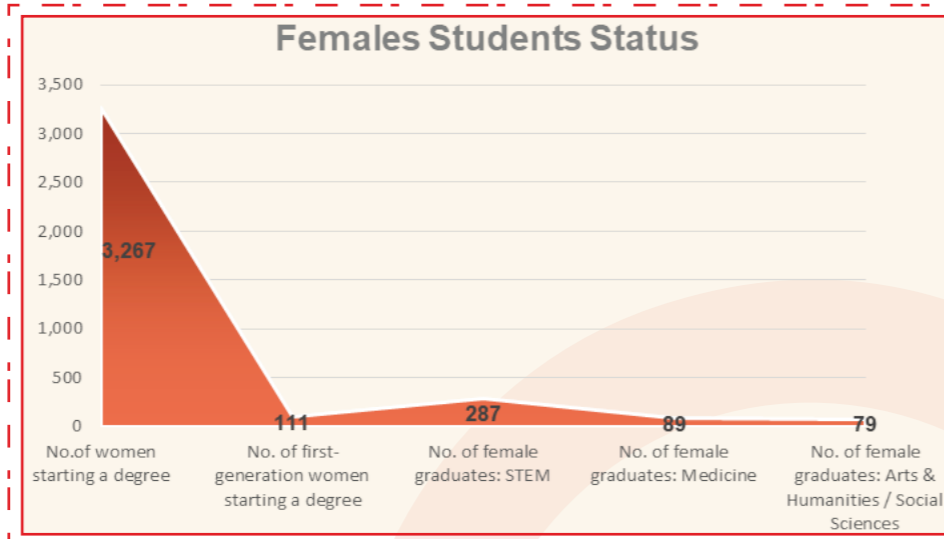
Social Contribution & Participation

Women in STEM

Women, the disabled, and minorities are especially encouraged to apply in any discipline at Air University. Men and women, people of all ages, sexual orientations, countries, religions, and beliefs are all welcome to apply to Air University, which believes in stimulating the positive value of variety, promoting equality, and challenging unfair prejudice. It has stated expressly in its selection and recruitment process policy that it will hire the best candidate for the job on the basis of merit. Faculties of those subjects where females are less, in those departments' women are encouraged to participate and joined the departments. Our 97 senior academic female staff members have been assigned to various educational departments

Research Analysis

Our management sciences researchers have explored that women entrepreneurs should be more promoted in the field of every business. In order to maintain a good quantity of both male and female professionals.



To address the discrepancy, policymakers and academics must actively work to organize affirmative action-driven projects that will empower women professionals and lead to the achievement of gender equality in the workplace. Air University has designated females in the senior official post to promote diversity in the workplace.



Performance Assessment



Equal Opportunity Policy

Air University follows an equal opportunity policy for all students, regardless of gender. We have admission policies and academic requirements in place to help with this. It has created a platform for women to flourish in the educational sector according to their own preferences and make career decisions.

Daycare Center

Air University has a Daycare Center accessible to all female employees. Female students with young kids are also accommodated in case of space availability. It supports women's participation and has a policy of paid maternity leave for 3 months.

Gender Discrimination

Our University is committed to making sure that fair and effective procedures and processes are implemented and adhered to when selecting and deploying people to fulfill organizational needs. All potential candidates will be assessed according to their skills, knowledge, qualifications, and capabilities. Regard will not be given to factors such as gender, marital status, race, religion, physical impairment, or political opinions. Air University places a strong emphasis on merit-based promotions for its personnel and academics. It assesses them fairly depending on their academic performance.

Student Learning & Academic Excellence

Apprenticeship

Chance to work as an apprentice in industry projects after 1st semester for students with bright academic records and relevant skills. The student will be working on Industry/Research Projects, Data sharing for aerial vehicles, etc.

Student Achievements

At the Youth Robo Tech event, which was held on January 22-23, 2022, at UET Peshawar, students from Air University received six awards over twelve modules, including the Line Following Robot competition, Level Project Exhibition, and Best Ambassador Award.



6 CLEAN WATER AND SANITATION



ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

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Publications

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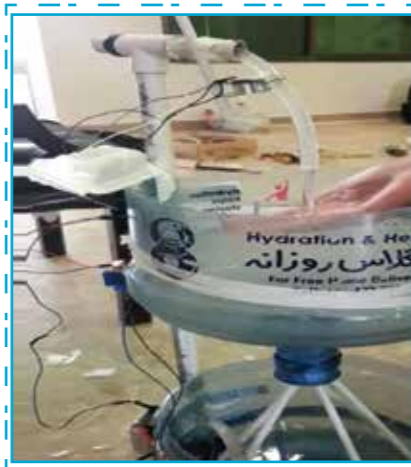
FYP

Social Contribution & Participation

Work Shop on Building Water Saving

Air University Islamabad, a workshop on Building Water Saving

Devices was held. The Robotics & Automation Society at Air University created the first Smart Tap prototype. The prototype was well received, and the university administration requested that it be used in the ablution area and washrooms. Scrap materials were used to construct the body and all of the building components. Discarded dispenser bottles and damaged PVC pipes were used for the main body. This system is suited for use in underserved communities.



Research Analysis

As per Pakistan's standard policy for water security and purification, the various departments of the Air University conducted an extensive study on the cleansing and sanitation of water. Water should be available both inside and beyond the university's boundaries, and it should be clean, disease-free, and tested in accordance with industry standards before being made available for human consumption.

Performance Assessment



Water Recycling Program

Air University, E-9 Islamabad is located at the heart of the city, the water sewerage and the exit water are connected with the main lines of the Islamabad sewerage system. However, a portion of Air University's water is reused to water green fields and maintain the greenery of the complex. At the new South Campus, the university is already prepared a comprehensive recycled program to maintain a huge green belt and the green areas of the Campus. The university has also prepared procedures to conserve water and made channels to use rainwater for the maintenance of the grass and green fields.

Water Efficient Appliances Usage

Air University believes in a cost-effective method for growing economies while reducing energy usage. Each restroom attendant has been assigned the primary job of monitoring water use and improper use of hand washing faucets.

University's Water Security

Air University has outlined all the requirements in the water policy that must be met, for instance, making sure water is used effectively every day by utilizing the economy mode, filling the dishwasher before using it, shutting off the faucets fully, and, when available and suitable, using the half-flush option on the toilet, etc.



Consumption of treated water

By Pakistan's National Drinking Water Policy, Air University is committed to providing clean drinking water to all of its employees, teachers, and students. In this regard, drinking water is normally measured every week for cleanliness purposes, and samples are collected from each department and student regarding the effects of drinking water through filters on their health, as well as suggestions for improving the drinking water system supply.



Student Learning & Academic Excellence

Students Recycling Contest

Students took part in the university's effort to recycle its plastic bags. We think that pouring plastic bottles and bags into the university's little canals can congest the sewage system and result in water that is not properly sanitized.



7 AFFORDABLE AND CLEAN ENERGY



ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

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24

FYP

Social Contribution & Participation

Green / Environment Friendly Campus

Air University Main Campus is currently working on the implementation of Solar Power. This process will be implemented on two building of the University

Total Number: 7.5 KW

The Air University South Campus would be the first purpose-built Green Campus that will be Environment-friendly and will considerably lower the carbon footprint of the Campus

Air University Car Pool World

We motivate the Students, faculty members and staff to use hybrid and electric Vehicles. Using renewable energy for electricity that is helping in reducing the cost of electricity Ride share designed to encourage commuters to adopt healthy and sustainable transportation options. The service, which has won recognition from UN Environment as part of a push to promote low-carbon lifestyles, also helps cut congestion and pollution



Work Shop on Building energy saving systems

Air University, an automation workshop was held for students to design an indigenous system to save electricity in household appliances. A pedestal fan was operated during the operation. It only turns on when it detects human presence nearby. The Robotics & Automation Society of Air University organized this activity

Workshops for Introducing Energy-related Technologies to School Student

Air University helps school students get acquainted to, and gain knowledge in the field of sustainable energy by conducting different workshops, experiments and activities

Research Analysis

Smart and Sustainable Living Environment

Our researcher team has worked on various projects, including development of; Energy Monitoring, Control and Conservation Systems, Green Construction of Smart Buildings for Sustainability, Smart agriculture systems including, an agricultural robot for performing precision operations like seed dispensing, on-spot irrigation and on-spot pesticide spraying and low cost solar powered Automated Irrigation System. The group also holds workshops to educate the next generation on the use of renewable and sustainable energy systems, highlighting the importance of using sustainable technologies.

Automated Smart Home Systems

Home automation is the automatic control and monitoring of household appliances and house features like doors, windows, fans, and so on. This system improves the standard of living at home, saves energy and money and it also provides support to elderly and disabled people in the home.

This project not only focuses on controlling the home appliances and devices automatically but it will also enable the user to control them through a web application or smartphone application

Cost-Effective Net-Zero Energy Buildings in Different Climatic Zones of Pakistan

A detailed study be carried out to ascertain the wasteful usage of energy in buildings due to poor design and non-usage of the latest energy conservation technologies as well as determine the cost-effective methods of integrally incorporating the use of Renewable energy sources for producing electricity,

within the building design to meet the majority of the lighting, heating and cooling requirements of existing and new buildings.

Solar Powered LED Smart Street Lighting System

It automatically controls the brightness of the LED lamp depending on a particular time of day, especially in cases where full level illumination is not needed, thus reducing power consumption.

Sustainable Building Materials

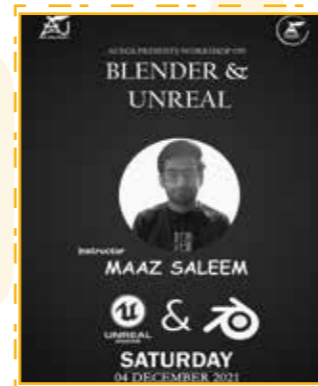
The manufacturing process of building material contributes to Green House Gases such as CO₂ to the atmosphere to a great extent. The natural disasters like global warming, ozone layer depletion, unexpected seasonal variations and decreasing land surface have now moved the center of attraction from development to sustainable development. Selection of appropriate building material helps to use the energy efficiently.

Energy Saving in School Buildings in Pakistan

Building energy simulations were also carried out using TRNSYS® software for validating and comparing the actual energy consumed and optimal energy consumption resulting from building energy simulation of the existing and re-designed building.



The results highlighted that if the building had been designed with proper considerations for energy efficiency, up to 30% of energy could have been saved.



Performance Assessment



Elements of Green Building

All buildings are well ventilated, built to support energy saving with coolant walls (thick walls). Solar system is being installed to decrease reliance on electricity. Sky light roof covers the open area to instead of concrete ceiling to ventilate and light the blocks. AU Kamra sub campus has installed 250 KW (extendable to 500 KW) Solar set-up. To promote the cause of Green Campus, it would be dovetailed with the Sewage Treatment, Solar Agriculture, and Rain Water Harvesting etc.

University Investments

The greenhouse emission policy at Air University was created to combat air pollution and harmful chemicals that are harmful to human health as well as to lessen the severity of climate change

Austerity Measures

It is the major duty of each department attendant to turn off all the appliances when faculty, staff, and students leave their offices and classrooms. It will aid in bringing down the exorbitant price of electricity.

Student Learning & Academic Excellence

Sustainable Course

In its undergraduate and graduate curricula, Air University offers more than 35 sustainable courses from introduction to environments to resource management to educate students about renewable energy sources and their significant impact on climate change.

AU E-Gaming Society and AU robotics and Automation Society

Our university two clubs AU E-Gaming Society and AU robotics and Automation Society have contributed significantly to numerous projects and raised awareness among students, staff, and faculty about the need to establish a sustainable environment on and off campus for better use of energy resources.



8 DECENT WORK AND ECONOMIC GROWTH



PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

99

Publications

33

Research Projects

39

FYP

Social Contribution & Participation

Workshop on Programme Coordinators

The primary objective of the annual coordinator's workshop is to develop a bilateral interaction with all program coordinators and develop professional discussion and develop and identify problem difficulties with a way forward for improvements.

Workshop on Faculty Orientation

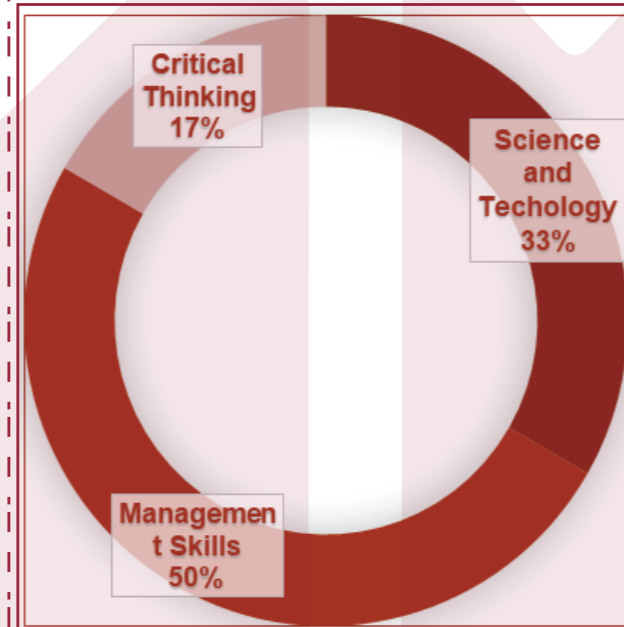
The purpose of the faculty orientation workshop is to provide an overview of the academic model used at Air University, explain how it works, and demonstrate how it can help faculty members achieve their objectives while promoting academic success

Faculty Professional Development

Air University includes two satellite campuses, four component institutions, and five affiliated colleges. It believes in equal opportunity for all of its employees, including faculty and staff, and



discourages workplace discrimination. Every year, Air University's ongoing professional development offers more than 120 training sessions in a variety of national and international courses to help staff and faculty improve their professional abilities and advance their careers for a brighter future.



Research Analysis

Our researcher has critically evaluated the relationship between training and employees' levels of job satisfaction with regard to their salary, the actual work they do, and interpersonal interactions and also discovered that opportunities for training should be provided to every employee in the organization based on their respective skill level and job responsibilities. The potential training opportunities for the employees make them feel better and optimistic in terms of their future growth and development and thus result in positive impacts on the level of their job satisfaction.

Performance Assessment

AU Workload Policy

Air University has a policy for mapping faculty workload to manage the human resource in each department and follow the rules of regulatory/accreditation bodies.

AU Honorarium Policy

The development of a top-notch academic and administration culture is a crucial part of AU's purpose. We reward our personnel with honorarium certificates to inspire them, depending on their successful performance.

Faculty Course Evaluation System

The faculty qualification for teaching a course is ensured by the departmental academic committee. The Chair department has informal interaction with each member and courses are allocated to the faculty members on the basis of their expertise in their respective areas. At the end of every semester, students are asked to evaluate the performance of faculty for each course through a student evaluation questionnaire form

Flexible education enhancement pathways

The management of Air University places a high premium on helping its faculty members advance their qualifications at the national or worldwide level



AU Corporate Social Responsibility

Air University School of Management's Corporate Social Responsibility (CSR) Policy sets out the guiding principles which facilitate the organization in fulfilling its core mission. Policy determines the ways in which AUSOM ensures that its functions and activities are carried out in ethical and sustainable ways for the public benefit.

Student Learning & Academic Excellence

Our Academic Programs for Career growth

AU Talent Hunting and Job Fair

A large number of students from different semesters got a chance to meet the representatives of organizations that offer jobs as per their skills. Some were interviewed on the spot whereas others submitted their CVs directly to the representatives of different organizations. On the occasion, HR representatives belonging to various sectors conducted the recruitment drives simultaneously. The purpose of the career fair was to allow organizations to meet potential employees in an informal setting.

Let's be Entrepreneurs

Air University Bits and Bytes Society (AUBBS) held a motivational and informative seminar for the emerging and potential entrepreneurs of AU. The motive of the discussion was to inculcate entrepreneurial skills and mindset among students in order to become successful entrepreneurs. About 180 attendees were part of the session who learned the basics of: Entrepreneurship education and training, Business plan formulation and assessment, Mentoring and incubation, Entrepreneurship events, and research-based activities.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

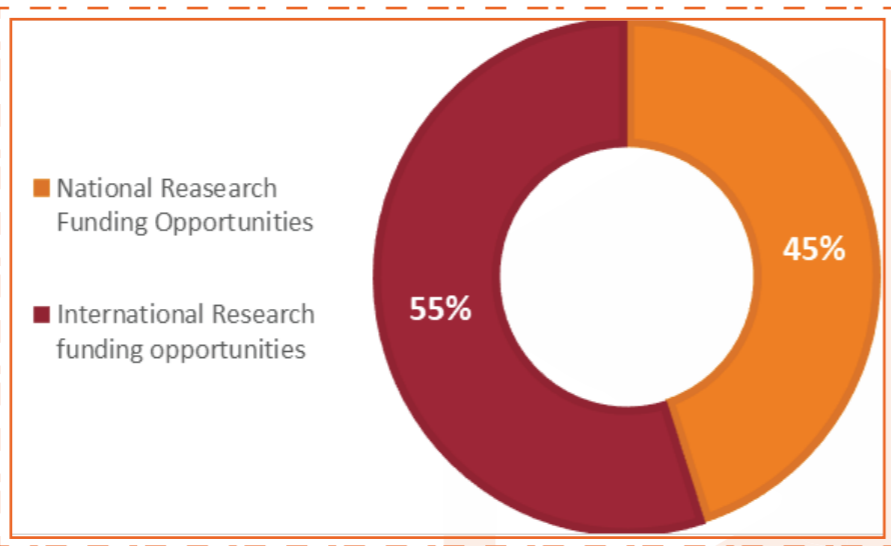
97 Publications | **36** Research Projects | **158** FYP

Social Contribution & Participation

AU Business Incubator Center
Air University Business Incubation Center (AUBIC) under AUORIC department is offer a venue for the pioneering ideas of our students, faculty and Alumni but also facilitate the incubation of new enterprises with innovative technologies by providing them with physical, technical and networking support and services. Its main goal will be to produce successful firms that will leave the program financially sustainable and freestanding.

Research Funding Opportunities
In order to facilitate our students and faculty in hunting for the best research grant opportunities particular to their expertise, here is a comprehensive list categorized separately under the heads of National and International opportunities for your convenience.

Sponsored/ Funded Projects
As a research-intensive university; the office aims to marshal the Research & Development and innovation which are central to the



sustainable economic growth of Pakistan primarily by identifying the funding opportunities. All the projects undertaken from 2011 onwards were mostly sponsored by the funding agencies such as HEC-TDF, HEC-NRPU, HEC-SRGP, PAF, PAC Kamra, NESCOM, IGNITE, International (UNICEF), US Embassy, USDA, NSF, US Science Foundation, UK,CANADA Embassies and more.

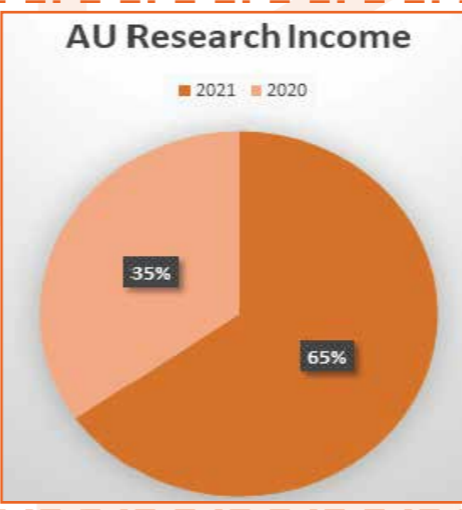
Research Analysis

Innovative Behaviors
Air University School of management sciences has done tremendous research work in the field of the industry and innovation relationship this approach "Practices-resources-uses-performance linkage to improve the individual performance and knowledge-based HR practices should be implemented in the organization it ill help lead the organization towards the innovative ideas. Innovative behavior (performance) is truly based on the human approach and it can be attained through consideration of knowledge involving concepts, ideas, and prototypes.



AU Digital World
Digital data has increased a key role in providing and sharing information. Therefore Air University Islamabad's department of computing and artificial intelligence has deeply and critically examined the method for protecting the misuse of the data through the medium of using digital technology which has become a serious issue globally.

AU Smart Devices Security
We focused on security analysis of Android OS, customization of Android OS with security enhancements, addressing privacy concerns of users, that includes securing files, folders, pictures,



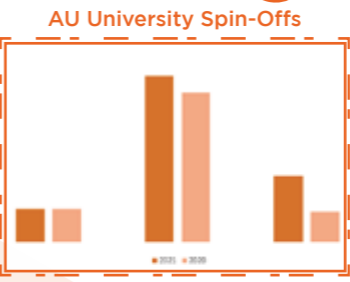
industries of Engineering, Information Technology, Banking, Telecommunication, etc.

gallery and sending of usage statistics to Google and providing strong user control of device sensors i.e. GPS, WiFi, Mobile Networks, Camera, Mic etc..

AU Network Cyber Defence
Securing network infrastructure against cyber hacks is among one of the top priorities in any private sector, government departments, military or any other sensitive organizations. The research would target analysis of network log information using advanced machine learning techniques, effect analysis of network security policies on a large network, detection and prevention of advanced cyberattacks.

Performance Assessment

Job Career
The placement and Alumni Affairs office of Air University is responsible for seeking internship and employment opportunities for its students and alumni. It also serves as a bridge between the Alumni and the University.



Each year, various organizations are invited to participate in the Career Fair, where students and graduates of the University get a chance to interact with representatives of major private/public sector organizations from the



AU Industrial linkages
In order to arrange internships, trainings and workshops, field trips to industry and research institutes, establish industrial links, and encourage the commercialization of faculty and student innovation, AU established the International Cooperation Office and Office of Research, Innovation, and Commercialization.

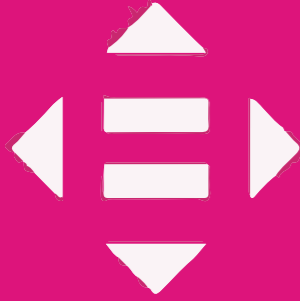
Student Learning & Academic Excellence

AU Student Exchange Program
AU team comprising of 6 students from AUSOM participated in Erasmus+ student Exchange program at Anadolu University Eskisehir, Turkey in spring semester. The program covered multiple series of learning levels. Students not only flourished their academics but also interpersonal skills at Anadolu University. The program offered the courses which were also offered at Air University for smooth transfer of credits at the end of the programme.

Future of App Industry
Huawei Pakistan conducted an informative session of new Huawei technologies at Air University; Future of App Industry. About 170 students attended this session where they also registered as Huawei developers on the spot.

Youth Robot Tech 22
It is a platform where students got to know many aspects of robotics and IT competitions. Our AU student teams learnt a lot from other teams. Our Students performed excellent in many modules like Line Follower, Project Exhibition etc.and earned 6th position.

10 REDUCED INEQUALITIES



REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES

3

Publications

9

Research Projects

7

FYP

Social Contribution & Participation

Promoting National and International Cohesion via Diversity and Unity

AU Cultural Society club gives right set of circumstances to organize events revolving around traditions providing knowledge, experience and build nerve in students to exercise their skills practically. It provides an opportunity of learning how to tackle/appliance challenges in the future career. It believe in National Cohesion through Unity In Diversity

AU Women in Computing Club

In order to promote women's empowerment and lessen bias and gender discrimination in academia and the workplace, the department of computing and artificial intelligence has created a platform where all women are encouraged to collaborate and advance the field of technology through their expertise and commitment.

AU Debating Club

Our AU Debating Society's objectives are to improve students' critical thinking abilities, articulation, research skills, conflict resolution, tolerance, greater empathy, emotional control, and a broader perspective of the world. It also teaches faculty, staff, and students how to structure and organise their thoughts while also fostering their analytical and research abilities

Research Analysis

No tolerance for bullying at Workplace

The psychology department at Air University worked diligently to combat bullying and its effects on both the individual and the group. In order to overcome this challenge, training and coaching and psychological sessions are typically conducted at the tertiary stage to lessen the severity of such situations and foster awareness among the people in order to create a safe and conducive environment.

Humanitarian Logistics

Through training, development, and counselling sessions with staff, students, and faculty to address insecurities, improve knowledge-sharing behaviors, confidence-building skills, and career development, Air University promotes the culture of humanitarian logistics for the organization's better productivity and effectiveness.

Performance Assessment



Non Discrimination Policy

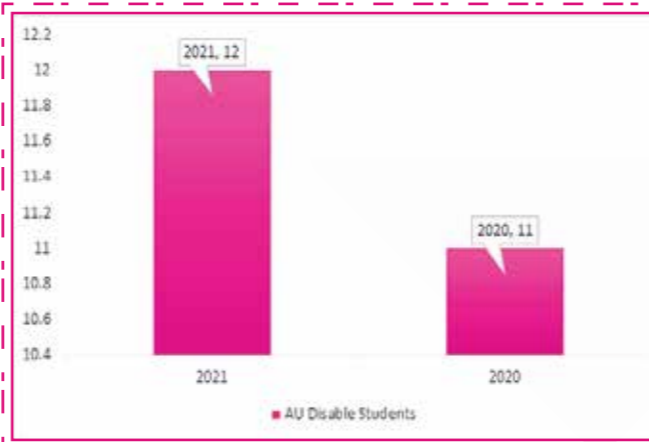
Air University follows open door policy, rights of employees and students reporting discrimination from educational or employment disadvantages are protected through formation of committee in case of any such instance.

Anti-Harassment Policy

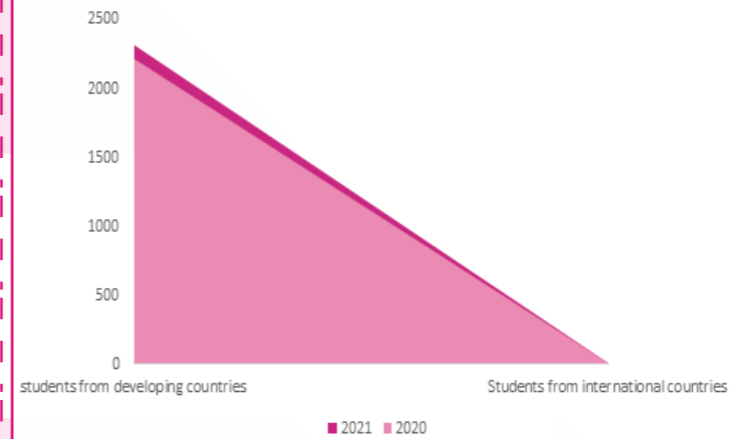
Seeks to handle and prevent hostile circumstances that undermine employees' dignity

A support for Differently abled students

Air University is committed to a policy of equal opportunities for persons with disabilities to pursue their higher studies in a conducive environment and to ensure accessibility for the disabled to higher education with provision of disabled friendly campuses and classrooms



Overseas Students



AU need based Scholarship

Through this scheme AU funds in each semester to needy students who face the financial constraints ranging from 25 to 50% of tuition fee discount.

Student Learning & Academic Excellence

AU Sha'oor Society

It works for social welfare and character building of youth and are dedicated to bring academic, social and moral awareness in the society. Explicitly, Sha'oor is nonpolitical, non biased student organization, works on numerous civic engagement projects and community development programs through its platform for the wellbeing of the community.



11 SUSTAINABLE CITIES AND COMMUNITIES



MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

10

Publications

34

Research Projects

27

FYP

Social Contribution & Participation

Cultural Carnival

Air University Cultural and Arts Society organized an amazing cultural carnival in order to throw light on the cultural heritage. More than 2000 students came together to celebrate these cultural performances which included cultural walk, cultural dances, display of art work, and many more activities at the event.



Air University Band performance, dance and drama Competition

In order to foster cultural variety on a large scale, our university has held various competitions among students, faculty, and society.

Research Analysis

Right building materials promotes effective energy utilization

According to the findings of our engineering department's research, cities are expanding quickly due to modernization and



development, and their primary structural element is buildings. With an emphasis on using natural resources effectively while also safeguarding global ecosystems, sustainable buildings are designed, built, maintained, repaired, and demolished. Choosing the right building materials promotes effective energy utilization.

Performance Assessment



AU Travel and Explore

Air University provides their students and staff with local Shuttle bus services for travelling in twin cities i.e., Islamabad and Rawalpindi. Air University has its own shuttle service, which includes high-rise buses and coasters.

These transportation services are utilized to transport students and employees to their destinations, and Air University encourages students and staff to use the facility to reduce overcrowding and pollution on campus.



Our Pedestrian Paths

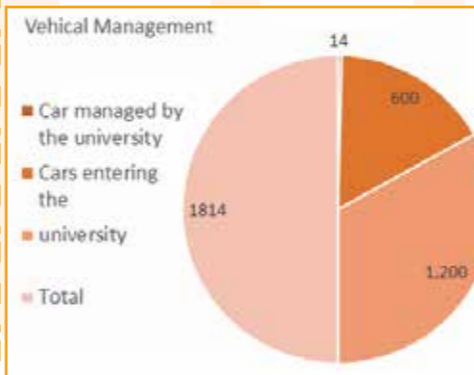
Air University's infrastructure, car parking areas, motorcycle and bicycle parking, and pedestrian footpaths are all provided in accordance with proper design and standards, and students and staff are encouraged to use private carpool services to avoid additional traffic and burden on campuses.



Air University

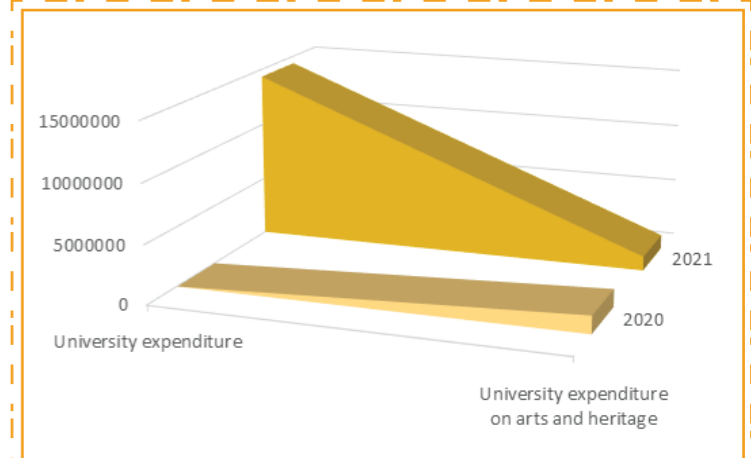
Vehicle Management

The administration department is very cautious about how the automobiles are parked and handled so that heavy traffic is avoided at the main entrance gate and the flow of traffic is smooth and accessible to prevent any accidents



Air University Thespian Society

AU All cultural events at the university are coordinated by the thespian society. Each year, a separate fund is set aside to increase faculty, staff, and student interest in this field and their understanding of its significance in the city's interior.



Student Learning & Academic Excellence

AU Sustainability Courses

We have added many courses for our students in the program undergraduate and postgraduate to learn about the infrastructure of the cities as per the environment and community and overcome the challenges in the green infrastructure

AU Cultural Affairs

Honoring the diversity of our multi-cultural land, Our Cultural Society whilst collaborated with air university music society and conducted an event of Rang-e-saqafat to recognize your culture, bringing with us cultural dances embodying the true meaning of what it stands to be a Pathan, a Sindhi, a Balochi, a Punjabi or from Hunza



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

8

Publications

25

Research Projects

27

FYP

Social Contribution & Participation

Love Cleanliness Program

The Love Cleanliness program was introduced at the class level to refresh the ideology of cleanliness and to make the environment around the university squeaky clean and hygienic

Environmental Solutions Program

The aim of this program was to develop environment-friendly projects, where no hazardous material was suggested to be used. Every product contained at least 85% of useless things to produce a recycled product. The idea was to bring something innovative with no copyrights

Re-craft Competition Program (Recycle, Rebuild, Reuse)

The students were suggested to use home materials for the crafts competition. The target was to make the craft of recyclable things or depict some idea regarding recycling

Research Analysis

Equal Opportunity Policy

The AUSOM department at the Air University has diligently worked on waste management strategies that deal with food

reduction and control. After putting a lot of effort into this field, it has been discovered that anticipated guilt and awareness of the consequences are crucial indicators of reuse and reduced food waste intentions, respectively. Numerous studies have been conducted to measure the indicators and identify the variations in controlling waste within the premises.

Sustainability of food waste reduction

The sustainability of food waste is one of the most important contemporary economic, social, and environmental issues that encompasses useful academic, practical, and policymaking implications. Under the domain of sustainability, food waste is a serious global challenge with the growing public, political, and corporate concerns. Important implications for policymakers and all the stakeholders, especially for marketers, including advertising strategies, policies to mitigate the impact of food waste, and the development of educational programs related to food waste. The university has devised a policy for food to control and raise awareness among employees, faculty, and students about how to avoid misusing resources and food.

Performance Assessment



Anti-littering Program

The program intended to maintain the beauty of the campus. The improper disposal of any form of litter was strictly prohibited on campus. The posters for the disposal of litter are any waste material, garbage, or rubbish, including but not limited to food, food wrappers, paper, cans, bottles, or discarded debris placed all over the campus.

Decor by recycling waste

The sustainable solutions efforts were carried out by planning and executing waste products. The plastic bottles and other recyclable waste were reused to make dustbins, robots, and other products to décor the campus.



Student Learning & Academic Excellence

Study programs

To teach the students about the importance of knowing about global warming and the misuse of energy and food resources, which has an ultimately detrimental impact on society and the planet as a whole, we have added the courses of introduction to environmental sciences, social psychology, and environmental psychology to each curriculum of undergraduate and graduate studies.



13 CLIMATE ACTION



TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

4

Publications

10

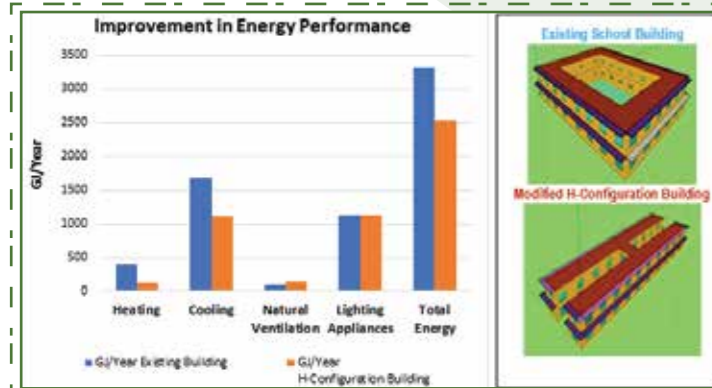
Research Projects

6

FYPs

Social Contribution & Participation

Air University has undertaken various projects to address the problems caused by global warming and has significantly contributed the nation's climate. Development of Smart & Assistive Technologies for Energy Conservation in Buildings. Solar Powered Intelligent LED Street Light with Sun Tracker. Design and Development of an IOT based Smart Meter Lab Model.



Performance Assessment

Efficient Usage of Appliances and its storage

Air University is very particular about how much electricity is used, thus it has installed several energy-saving gadgets to reduce its excessive use of it without raising the university's costs.



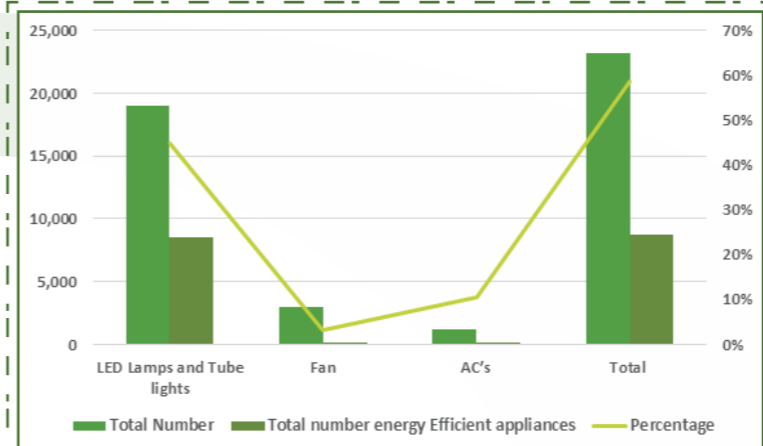
Thinking Green for Sustainable Development

Air University takes pride in being the organizer of Pakistan's largest technical Olympiad, Air Tech. The event is an amalgamation of numerous technical events highlighting a theme which always is a major problem being faced globally. AirTech'19 addressed the issue of Climate Change, with the underlying theme "Thinking Green for Sustainable Development"

Research Analysis

Contributors to CO2 Emissions
The generation and use of energy are significant contributors to CO2 emissions. Globally, approximately 30% to 40% of all energy consumption can be directly or indirectly linked to buildings. Nearly half of energy usage in buildings is linked to maintaining the thermal comfort of the inhabitants. It is concluded that the integration of the Phase Change Material (PCM) layer with the corn husk wall provides an adequate solution for low-cost and low-energy buildings

AU Green Gas House Emissions
A policy for greenhouse gas emissions has been developed by Air University to protect against the climate-warming effects of air pollution and other unfavorable indications. More engineering degrees are available through Air University, which also focuses on lowering laboratory emissions and safeguarding the environment both on campus and outside its boundaries.



Limiting carbon emissions
University has committed to supporting Air University's effort to achieve zero carbon emissions by 2025 within the timeframe required by national policy. It will be reduced from 4938 metric tons to the least as per the standard Carbon emission of our country
All buildings are well ventilated and built to support energy saving with coolant walls (thick walls). The Solar system is being installed to decrease reliance on electricity. Sky light roof covers the open area instead of concrete ceiling to ventilate and light the blocks.



This theme was created to support the causes and enhance awareness of individuals for clean and green Pakistan. All offices were provided an indoor plant and buildings corridors were also decorated with indoor plants to create better working environment and increase awareness of Air University employees.

AU Green Pedestrian Paths
To provide a healthy and welcoming atmosphere for their staff, students, and teachers, Air University has ornamented each pedestrian pathway with the planting of as many trees as possible

Student Learning & Academic Excellence

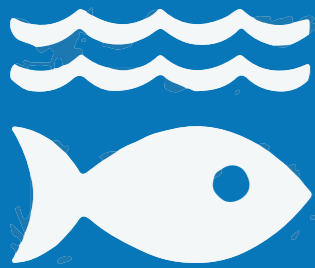
Live green to save more green
The Shaor Society, in partnership with the Forest Department in Islamabad and PTC, donated 2000 plants to Air University students, employees, and teachers. Sukhchain, Kachinar, Cheer, Wyeeping Willow, and Amrood were among the saplings delivered by the volunteers



Cleanliness and Awareness Walk
The walk was started by Air University students who had the concept that our country should be beautiful and clean, and that we can empower our youth to do so. This Safai and awareness walk educated the youth on the need of environmental cleanliness



14 LIFE BELOW WATER



CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

9

Publications

1

Research Projects

9

FYPs

Social Contribution & Participation

The engineering student from our university worked on the project and really extracted power from the shallow streams using a hydrodynamic design and optimization of cycloidal vertical axis water turbine.



Analysis of Vertical Axis Water Turbine for River Application

A student has created and constructed a vertical axis water turbine application for rivers. The aim is to design and fabricate a vertical axis wind turbine with automated blade angle correction (alignment of the blade to maximize lift by adjustment of angle of attack) depending on fluid speed and angle of incidence.



Solar-powered Automatic Drip Irrigation System

The variation of the spatial and temporal distribution of available water for irrigation makes significant demand on water conservation techniques. Irrigation System provides a sustainable solution to enhance water use efficiency in the agricultural fields using renewable energy. This system allows farmers to apply the right amount of water at the right time.



Research Analysis

Southeast Asia has a much-diversified landscape and varied natural resources, including abundant water resources. To tackle this challenge, the department of engineering at Air University has discovered that the use of micro turbines is a very feasible option considering that the power generation density of the micro turbine comes out to be approximately 2100 kWh/year/m², with minimal adverse effects on the environment.

Performance Assessment

Rain Water Harvesting

The landscape of AU Campus lends itself to be capitalized for subject harvesting plus water catchment. The 50 feet gradient of land has a natural depression close to the downstream end. This provides the opportunity for subject capitalization consequently, a small semi-pukka basement Lake is being planned to collect Rainwater as well as water catchment holes to support the water table.



Student Learning & Academic Excellence

In an effort to enhance the profession and improve living conditions by sharing its knowledge, Air University is offering a variety of environmental science courses for its undergraduate and graduate programmes, including Heat and Thermodynamics, Weather and Meteorology, and others.



Seminar on Climate Change

All of the students at the Air University attended a climate seminar in which the following topics were covered in order to address the issue of global warming and its negative effects on the environment and biodiversity i.e. Impacts of climate change on wildlife and air pollution, changes in forest cover, the vulnerability of urban flooding due to climate change, skin diseases caused by climate change, waste management, and water recycling.



15 LIFE ON LAND



PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

6

Publications

14

Research Projects

17

FYPs

Social Contribution & Participation

Our University Shaor Society's contribution to the greening of a campus and a nation

Air University Sha'oor Society and Friends of Environment work together to convert today's wastage into a Greener and Cleaner Pakistan. Air University also sign an MOU with Friends of environment for the project titled from waste to Plant. Under this project Shaor Society's volunteers achieve the target of 17,000 plantations of Trees all across Pakistan using from waste to plant concept.

Clean Green Pakistan Movement

In order to actively participate in the Clean Green Pakistan Movement launched by the government of Pakistan, Air University held a Tree Plantation Drive at Margalla hills, which was attended by a large number of university students, faculty staff and management team members.

Under the AU Plantation Drive 2021, more than 10,000 seed balls were thrown near Talhar village at Margalla hills. The volunteers also brought various saplings including Sukhchain, Kachinar, Cheer, Wyeeping Willow and Amrood.



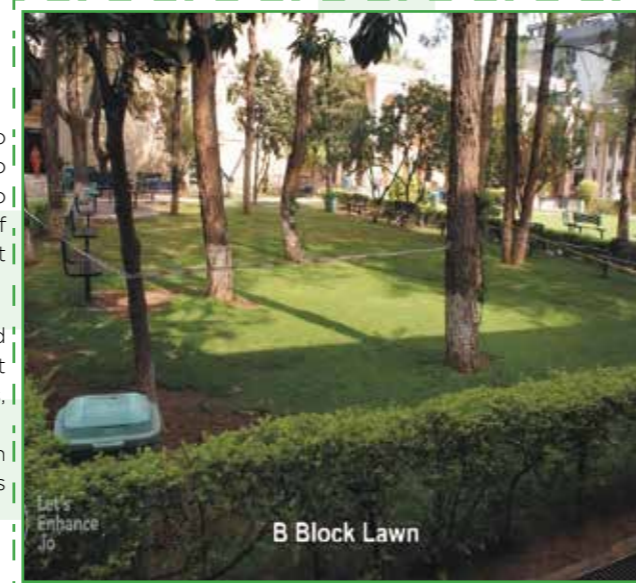
Research Analysis

Impact of Biogas investment on the sustainable growth

The researcher of the department of the air university school of management sciences has discovered that Biogas investments have substantial impacts on farm productivity, time savings, indoor air pollution, household hygiene, and expenditure, which in turn has played a role in improving the status of people and community at large.

Importance of Green financing for environmentally conscious corporate social responsibility

The key concerns of stakeholders and politicians in the new competitive business climate are the protection of environmental sustainability and social responsibility, recognizing factors driving economic development so that quicken their commitments to climate alter beneath the Paris Agreement and the sustainable development goals (SDGs). In this regard Air University has collaborated with Friends of environment for the project titled convert today's wastage into a Greener and Cleaner Pakistan



Performance Assessment

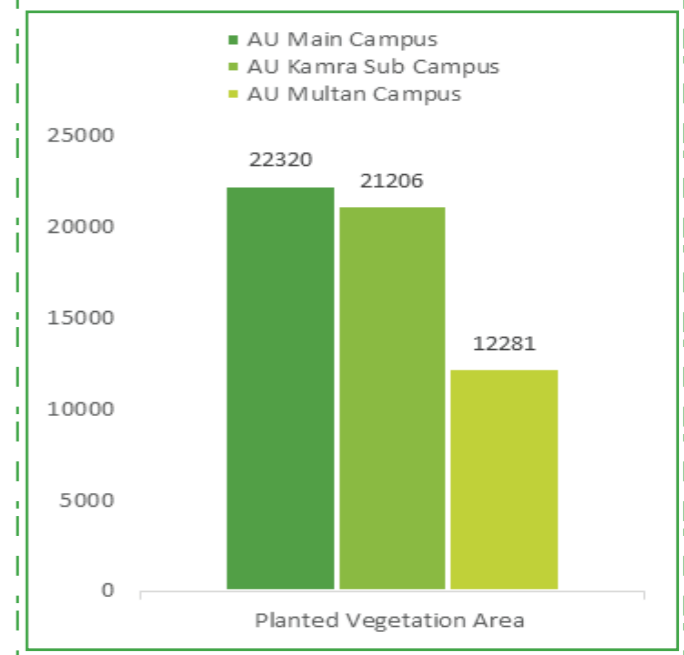
Air University Campus Covered in Forest Vegetation



Air University believes in biodiversity and the stabilization of natural systems In order to combat the problem of global warming. To stabilize the soil and the slow water flow, Air University has planted vegetation and committed over 45% of its infrastructure to a forest. Our researchers have discovered that forests and other man-made vegetation have a significant impact on people's ability to cope with stress and maintain good physical and mental health.



Air University Planted Vegetation Covered Area



Student Learning & Academic Excellence

Environmental Sustainability at Air University

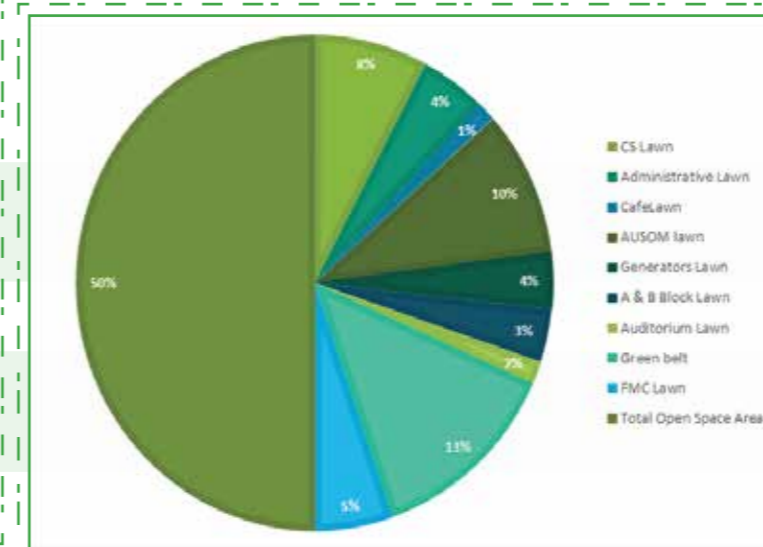
Air University is fully committed to environmental sustainability. This is in compliance to the 'Clean, Green National Environmental Policy.

E-Vehicle program

Air University's e-vehicle "Markhor" developed by the student team named "Mech the Tech". Markhor is an energy-efficient electric car designed to compete in the international energy-efficient vehicle building competition, Shell Eco Marathon. The recent design has a mileage of 323km/kWh



AU Islamabad



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

3

Publications

5

Research Projects

16

FYPs

Social Contribution & Participation

Roundtable Discussion on Climate Change Impact on Traditional and Non-Traditional Security

Climate change in the environmental sector can impact military security which in turn can damage national security. In order to explore the linkages between military security and water security with the emerging threats of climate change, roundtable discussion with faculty and staff was held to overcome its challenges.



Workshop on Contemporary Security Issues: Perceptions and Narratives

The Faculty of Aerospace and Strategic Studies held its inaugural workshop from 22nd-24th February, 2022, on contemporary security issues and how perception and narratives related to those issues have an impact factor. It was attended by young scholars and researchers as well as officers from the Pakistan Air force.



Roundtable Discussion on the Evolving Russia-Ukraine Crisis

The pertinent matter of the Russia-Ukraine crisis and its evolving situation were elaborated on and discussed.

Impact of Emerging Technologies on Strategic Stability

Our Strategic Studies department is convening a panel to (i) explore the current landscape of emerging technologies and their impact on strategic stability, (ii) examine the role of Artificial Intelligence as a force multiplier, and (iii) review the debate on the use of hypersonic weapons.

Webinar on

'IMPACT OF EMERGING TECHNOLOGIES ON STRATEGIC STABILITY'

FACULTY OF AEROSPACE SCIENCES AND STRATEGIC STUDIES

16TH NOV 2021 (TUESDAY)
16.30 - 18.30 HRS
WEBINAR ID: 960 8662 9293
PASSCODE: 564402

Emerging technologies continue to change the security calculus of states. Their development and use has ramifications for the conduct of warfare and defense, and requires an understanding of approaches to the same. In the current global landscape, the major powers are among the leading states that are investing in the development and deployment of these technologies. It is critical to understand their impact on strategic stability, as well as to determine their ramifications for the future of regional and global security. The Strategic Studies department at Air University is convening a panel to (i) explore the current landscape of emerging technologies and their impact on strategic stability, (ii) examine the role of Artificial Intelligence as a force multiplier, and (iii) review the debate on use of hypersonic weapons.

Mrs. Ayesha Malik

Ms. Amna Rafiq

Mr. Shayan Jamy

Ms. Shaza Arif

Research Analysis

A route for Aerospace and Strategic Studies

Air University has a dedicated department of aerospace, a strategic studies department, and an office for international cooperation. These departments work together to forge a solid link between national and international regions by inviting students and faculty to advance research with their expertise and to offer rational solutions for the peaceful dialogue and stabilization of the south region with all other regions of the world.

Performance Assessment

Good Governance for the Strong Institutions

The administrative, academic, and research issues of Air University are handled by six primary statutory bodies i.e. Board of Governors, Academic council Meeting, Finance, and planning committee, selection board, university functional committee, and faculty board of studies. It deals with the accountability and transparency of every stakeholder and the institute's tangible assets, safeguarding them from any violence and devastation both inside and outside the institution.

Dealing ethically and morally with social media

We live in the age of digital technology, so it is necessary to maintain the peace and order of the university in accordance with its social media policy. Therefore, we have made a certain policy for the use of social media to prevent any individual conflicts of interest and protect the university's reputation from any violence while misusing the social media platform.

Student Learning & Academic Excellence

Educational Services

Air University has introduced three different programmes: BS international relations, MS Strategic Studies, and Ph.D. Strategic Studies for their students, staff, and faculty to gain the best knowledge for developing strong institutions, resolving conflicts at a large scale, and establishing stability and peace in the regions



Center for Aerospace and Security Studies (CASS)

The Faculty of Aerospace and Strategic Studies (FASS) arranged a visit for Students and briefed about CASS's publications, national and international engagements, internship opportunities, and the role of airpower in Pakistan

Our Integrity

To address the concerns, issues, and challenges of students, staff, and students for making fair decisions and to create a healthy environment for learning and working, Air University has established the Discipline Committee, the Unfair Means Committee, the AU Harassment Monitoring Cell, and the Center for Counseling and Psychological Services



17 PARTNERSHIPS FOR THE GOALS



STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

3

Publications

3

Research Projects

5

FYPs

Social Contribution & Participation

Air University has collaborated with the Institute of Cost and Management Accountants of Pakistan, Capacity Analytics, National Defense University, CISCO Networking, Akhuwat Islamic Microfinance, Karakoram International university of Pakistan at the National platform to support the SGD 5 gender Equality and SGD 4 Quality Education, SDG 8 decent work and growth in terms of the following conditions. It has provided a platform for all fully qualified students to excel in their skills in the field of Accounting and Finance.

Collaborated with Strategic Vision Institute, Institute of Strategic studies, Hashoo School of Hospitality Management (HSHM) Islamabad, Tech Avenue, Intellectual property, and Islamabad Chamber of Commerce and Industry at the National platform to support the SGD 9 Innovation, industry, and economic growth. It has provided a platform to promote research activities, student exchange programs, equal opportunities for jobs, and conduct seminars and workshops at various forums.

Work in partnership with Askari Insurance health to support the SGD 3 Good Health and Well Being, a platform to promote the various internship programs at Askari Insurance, and Facilitates AU staff and Faculty to avail of medical services.

Ideagist at National platform to support the SGD 13 Climate Action in terms of the following conditions; Entrepreneurship Training Registration for Virtual Business Incubator service/ Startup Pakistan Program around 53 AU students registered for IdeaGist Startup Pakistan Cohort 4-6, Information regarding various Ideagist online events/webinars was timely disseminated via Emails/social media handles with students/staff.

Team up with JS Bank of Pakistan to support and promote the SGD 13 Climate Action. It has provided a platform to promote the open banking ecosystem academic alliance to cut down the financial technology.

Kenyan National Defense University Delegation to Air University

AU welcomed a delegation from National Defense University Kenya on August 24, 2022. The two main common disciplines discussed between NDU-Kenya and Air University were Aerospace Strategic Studies and Information Technology. The main purpose of the meeting was to persuade the Kenyan delegation to collaborate with AU. The potential collaboration opportunities stated were

- Online collaboration in research/ teaching. (Students/faculty exchanges)
- Incubation centers collaborate and explore funding opportunities in Kenya, Pakistan, and other agencies. (MS PROGRAMS FASS/FCAI)
- Joint seminars and webinars. (Ph.D. programs FCAI)

Research Analysis

Air University is partnered with the Journal of Business and Economics, the journal of corpus linguistics and the Journal of Linguistics and Literature is a blind peer-reviewed. In order to facilitate our students and faculty in hunting for the best research grant opportunities particular to their expertise, here is a comprehensive list categorized separately under the heads of National and International opportunities for your convenience

Research Funding Opportunities

The National funding opportunities are reckoned easier to acquire as they are only open nationwide while the International funding opportunities since available to many countries by and large; may be ascertained as more challenging. However, we encourage our faculty to win research grants against these open calls by submitting their proposals online

National Research Investments

To assist our study and achieve the finest results, air university is receiving different research funding opportunities from different national organizations for example National Funding Opportunities (HEC-NRPU), National Research Programme for Universities (HEC-TDF), Technology development fund (HEC), Grand challenge fund (HEC), Local challenge fund (HEC), Start-up research grant research (HEC SRGP), Social integration outreach program (HEC-SIOP), National Engineering and Scientific

Commission(NESCOM) Pakistan Aeronautical complex karna (PAC KAMRA), Pakistan Council of Science and Technology (PCST), Pakistan Science Foundation (PSF) and Ignite.

International Research investments

In order to obtain research funding for the creation of better and more productive opportunities for our researchers, we have worked with a variety of international organizations for example United Nation's Global Climate Action Award, Fonds Ernest Solvay, British Council Free Online Courses 2020, Indigenous PH.D. Fellowship Program, U.S. Department of Agriculture, U.S. Department of State, Common Fund for Commodities (CFC), National Geographic Society and Microsoft's AI for Earth program, Cipher Grant Programme, AHRC Global Challenges Research Fund (GCRF) Urgency Grants Pilot, Emerald Interdisciplinary Research Fund

Performance Assessment

AU has established formal links leading to the signing of MoUs / MoAs for academic / research collaborations with 40 foreign universities and companies so far.



National Research Investments

AU has also established formal links leading to the signing of MoUs for academic/ research collaborations with 24 local universities and companies so far.



Air University International QEC memberships

Global relationships are a priority for us as we seek to achieve the SDGs. These include our engaged member status with organizations such as the International Network for Quality Assurance Agencies (IQAAHE), Asia Pacific Quality Network (APQN), and Association of Quality Assurance Agencies of the Islamic World (AQAAIW).



Student Learning & Academic Excellence

Air University Shaor Society Club

The Shaor Society has concentrated on bringing up these pressing issues. Because it believes in honoring the orphans and needy, the subproject of Shaor Ray a Beam of Hope serves the orphans by sponsoring their children for this purpose. A lot of help is extended to orphan homes for their education and other needs. The main objective of the project is to work for the social and moral uplift of society.



Author

Sr	Status	Name	Designation
1	Report Approved by	Air Marshal Javid Ahmed, HI(M) (Retd)	Vice Chancellor
2	Report Reviewed by	Air Commodore (R) Ahmed Hassan	Director QEC
3	Report Prepared by	Mehreen Ishtiaq	Assistant Director QA (Ranking)
4	Report Designed by	Muhammad Sheharyar	Data Analyst