

DOW UNIVERSITY OF HEALTH SCIENCES

— TO HEAL, TO TEACH, TO DISCOVER —



MASTER STRATEGIC PLAN (2019-2030)
“A Bridge to Excellence”

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the Name of Allah,
the Beneficent, the Merciful



***LEADING TRANSFORMATION IN
HEALTHCARE***

VICE CHANCELLOR'S MESSAGE



Prof. Muhammad Saeed Quraishy
Vice Chancellor
Dow University of Health Sciences

Over 70 years ago, Dow Medical College was established in Karachi, Pakistan offering M.B.B.S., degree. However, in 2004, the Legislature of Sindh through an ACT established Dow University of Health Sciences with Dow Medical College, Sindh Medical College and Ojha Institute of Chest Diseases as its constituent entities. Since its inception, Dow has enjoyed indelible regional and global reputation of producing the best and the brightest physicians and health care providers. As the largest and most comprehensive health sciences system in Pakistan, Dow University of Health Sciences serves as an archetypal for quality and excellence in education, research and delivery of clinical care for other institutions in the region. This leadership role has been sustained for decades by the intellectual impact of our faculty, staff and students, which, has manifested itself both within the region and globally.

Continuing its insatiable pursuit for distinction, Dow University of Health Sciences has developed a Master Strategic Plan (2019-2030) which, is a blueprint for the path that this Institution wishes to adopt in its journey towards preserving excellence in education, research, clinical care and community service. It outlines its ambitions and aspirations and challenges us to continue to put forth our best efforts. *It is truly a bridge that together we will traverse to reach the University's stated vision, mission and goals - appositely entitled - A BRIDGE TO EXCELLENCE.*

We are fully cognizant of the pivotal role that this University plays in the region and have placed utmost priority on our students ensuring that we continue to provide them with outstanding learning opportunities

DOW UNIVERSITY of HEALTH SCIENCES AT A GLANCE TODAY

- **144 DEGREE & DIPLOMA PROGRAMS**
- **49 COLLEGES, SCHOOLS, INSTITUTES & OTHER ENTITIES**
- **OVER 9,100 ENROLLED STUDENTS**
- **OVER 4,000 FACULTY AND STAFF**
- **TWO CAMPUSES**

and the tools to succeed as valuable members of our communities. This is fortified by our eagerness to continue to adopt cutting-edge technology, develop state-of-the-art facilities and to inculcate a culture of innovation and discovery that informs delivery of quality patient care. These commitments are encapsulated in the Master Strategic Plan, which has been developed in consultation with the faculty, staff and students of this University with valuable input of key leadership of our community.

Another distinguishing feature of the Master Strategic Plan is the defined commitment to accountability and transparency. This would allow us to move forward in our journey unabatedly and to make informed decisions about the course we have to adopt in our quest to maintain excellence.

I would like to take this opportunity to thank the valuable members of the Executive Strategic Planning Workgroups and all faculty, staff, students and community stakeholders who actively participated in the development of this Plan. Without their unprecedented support and valuable guidance, accomplishing this remarkable feat would have been unattainable.

I am confident that we have the intellectual capacity, the creativity, the determination, and the discipline to focus on continuing to move Dow University of Health Sciences forward. I invite you to join my team and I as we continue to transform our aspiring vision into reality.

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EXECUTIVE SUMMARY

Last year, the University took an extraordinary step of engaging in a comprehensive strategic planning process. The purpose was to establish a vision that would define the trajectory of its growth for the 21st century and continue to set it apart from other academic institutions of higher education in the region. In the intervening period, the University established numerous task forces, committees, and subcommittees to evaluate, question, and propose recommendation on every aspect of its existence.

In the course of open and candid discussions, special consideration was given to continued enhancement of the four core missions of the University: *education, research, clinical service and community outreach*. Emphasis was placed on defining objective and measurable goals that would continue to enhance the reputation of this Institution and the value of education that is imparted to our students. The University was particularly cognizant of the fact that while its influence extends far beyond the confines of the region that it serves, its primary obligations are largely directed towards the citizens of Pakistan. Therefore the core of our emphasis in this Master Strategic Plan is to create and continue to deliver programs and services that are of relevance and value to the community that we serve.

The result of this exercise is the genesis of a Master Strategic Plan 2019-2030 that clearly outlines our unprecedented commitment to imparting quality education and training to students in myriads of our undergraduate and postgraduate programs. This Master Strategic Plan is the pathway that together we will navigate to accomplish excellence in education and training that is enriched by research and

scholarship that influences the delivery of outstanding clinical care to our patients;
it is the University's *BRIDGE TO EXCELLENCE*.

ABOUT THE UNIVERSITY

Sir Hugh Dow established Dow Medical College (DMC) in 1945. Up until 2004, it only offered M.B.B.S., degree that was awarded by the University of Karachi. However, in 2004, the Legislature of Sindh through an ACT established Dow University of Health Sciences (DUHS) with Dow Medical College, Sindh Medical College and Ojha Institute of Chest Diseases as its constituent entities. While our history as a University is relatively short, our accomplishments are nevertheless endless. At the present time, the University has over 4,000 faculty and staff, serving over 9,100 male and female students on two campuses. DUHS today is the harbinger of a new dawn of education, research and clinical care in this region and beyond. The four missions of DUHS are depicted below:



DUHS has 49 colleges, schools, institutes and other academic and non-academic entities on two (2) campuses:

- DMC campus
- OJHA campus

Presently, the University has the following academic entities:

- **MEDICAL COLLEGES:**
 - Dow Medical College
 - Dow International Medical College
- **DENTAL COLLEGES:**
 - Dow Dental College
 - Dow International Dental College
 - Dr. Ishrat-ul-Ebad Khan Institute of Oral Health Sciences
- **PHARMACY COLLEGE:**
 - Dow College of Pharmacy
- **NURSING:**
 - Institute of Nursing
- **CLINICAL:**
 - Dow University Hospital
 - National Institute of Diabetes & Endocrinology
 - Dow Institute of Cardiology
 - National Institute of Liver & G.I. Diseases
 - National Institute for Solid Organ Transplantation
 - Clinical Hematology & Bone Marrow Transplantation
 - Dow Institute of Radiology

- Dow Diagnostic Research & Reference Laboratory
- OJHA Institute of Chest Diseases
- Dr. Abdul Qadeer Khan Institute of Behavioral Sciences
- Institute of Physical Medicine & Rehabilitation
- **OTHERS HEALTH SCIENCES ENTITIES:**
 - School of Postgraduate Studies
 - Institute for Clinical Sciences
 - Institute of Biomedical Sciences
 - Institute of Health Sciences
 - School of Public Health
 - Dow College of Biotechnology
 - Institute of Business & Health Management
 - Dow Institute of Medical Technology
 - Dow Institute of Health Professionals Education

OTHER NON-ACADEMIC, RESEARCH CORE & ADMINISTRATIVE ENTITIES:

- Quality Enhancement Cell
- Office of Strategic Development & Implementation
- Office of Research, Innovation & Commercialization
- Advanced Animal Laboratory
- Dow Research Institute of Biotechnology & Biomedical Sciences
- Office of the Registrar
- Directorate of Internal Audit
- Directorate of Finance
 - Financial Aid Office

- Directorate of Human Resources
- Directorate of Information & Communication Technology
 - Campus Management Solution
- Office of Alumni Affairs & Resource Mobilization
- Office of Graduate Placement & Student Exchange Program
- Office of Student Counseling & Advising
- Professional Development Center
- Dow Institute for Health Professional Education
- Question Bank
- Directorate of Examination
- Directorate of Admissions
- Student Facilitation Centers
- Office of Procurement & Supply Chain
- Office of Planning & Development
- Human Serum Production Facility
- Dow Premium Health Water – *Riva Water*

Additionally, at the present time, it has the following Deanships, which provide the leadership and oversight of critical areas in the University:

- Dean, Faculty of Surgery & Allied
- Dean. Faculty of Medicine & Allied
- Dean, Faculty of Dentistry
- Dean, Faculty of Pharmaceutical Sciences

ACCREDITATION

Developing and delivering quality education and training to the students and outstanding clinical care to the patients is at the heart of this University's mission. In this regards, the University has and will continue to seek accreditation/recognition of its colleges, schools and institutes, undergraduate and postgraduate programs and clinical entities from relevant national and international bodies. It currently has following accreditation/recognitions of its programs from various relevant agencies in Pakistan:

- Pakistan Medical & Dental Council
- Higher Education Commission of Pakistan
- College of Physician & Surgeons of Pakistan
- Pharmacy Council of Pakistan
- Pakistan Nursing Council
- Sindh Healthcare Commission
- Drug Regulatory Authority of Pakistan
- National Business Education Accreditation Council

As a premier public institution, the University is keen to get engaged in selected areas of research and scholarship that continues to enrich our education, inform our clinical care and is of value to the community. We envision that acquisition of new knowledge will enrich the educational experience of our students, allow us to recruit and retain quality faculty and continue to improve the quality of care that we provide to our patients.

INTRODUCTION AND OVERVIEW

As it has done for the last seven (7) decades, Dow University of Health Sciences is destined to create a legacy of extraordinary achievement and academic excellence. The most critical element towards realization of this goal is the development and timely implementation of an innovative strategic plan that enables the University to take advantage of the opportunities that are presented locally and globally in the ever-expanding realm of education, research, clinical care and community service.

This dynamic and competitive environment presents both challenges and opportunities for the University. Therefore, it is extremely important that the strategic plan be developed within the cohesive framework that capitalizes on the distinctive strengths and contributions of various colleges, schools and institutes that collectively represent the intellectual core of this University.

This Master Strategic Plan is an outcome of many months of relentless work undertaken by the Executive Strategic Planning Workgroup, which, under the tutelage of Professor Muhammad Saeed Quraishy, Vice Chancellor, DUHS, has defined a grand vision for the future of this Institution. To be all-inclusive, stakeholders from all key components of the University and the community were invited to participate. This document is a product of the collective vision of this Workgroup and has been informed and influenced by the faculty, staff and students who are and always will be the major beneficiaries of this Master Strategic Plan.

DUHS' Master Strategic Plan has been built around a campaign entitled: "*A BRIDGE TO EXCELLENCE*" which is illustrative of the destination that the University has chosen and the path that it will adopt to reach its defined objective. Vital to the success of this plan is its shared-ownership by key stakeholders in the

University and the community who have not only embraced this vision but will make a concerted effort to successfully implement it in a timely manner. The University is heavily reliant on their continued efforts towards the success of its stated vision and mission and acknowledges their unprecedented ongoing commitment towards the accomplishment of our goals in the articulation of which, they have played an instrumental role.

In this document, information is presented in the following format:

- Section I: Overview of the Strategic Planning Process
- Section II: Vision, Mission and Values
- Section III: Aspirational Institutions
- Section IV: Strategic Goals
- Section V: Measurable Outcomes
- Section VI: Resource Planning for Achieving Strategic Goals
- Section VII: Implementation and Monitoring of Strategic Plan
- Section VIII: List of Appendices

Given the iterative and highly participatory nature of the University's strategic planning process, it is anticipated that the framework outlined in this document will continue to be refined and updated. *It is also envisioned that this Master Strategic Plan will inspire various faculties, academic, non-academic and administrative units in the University to develop a complementary strategic plan that supports the accomplishment of the University's vision for excellence in undergraduate and postgraduate education, development of infrastructure for enhancement of research capacity & innovation, delivery of outstanding clinical care and community service.*

SECTION I: OVERVIEW OF THE MASTER STRATEGIC PLANNING PROCESS

Given the fact that DUHS is the largest and most comprehensive health sciences institution in Pakistan, we share an unprecedented responsibility and enormous potential to continue to shape the future of health care in this region. Accordingly, Professor Muhammad Saeed Quraishy, Vice Chancellor, DUHS mandated that all key stakeholders in the University and the community be involved in the development of this Master Strategic Plan. The Executive Strategic Planning Workgroup (see below) was therefore constituted with this mandate in sight and the process of development of this Plan was informed and influenced not only by their active participation but also the valuable feedback that was actively sought from the faculty, staff, students, and members of this community.

The following guiding principles were used in the development of this Master Strategic Plan and it is anticipated that this will be incorporated within the planning process that will be subsequently employed by various academic and administrative units in the development of their own complementary strategic plans. It was envisioned that the Plan should:

- Be consistent with and contribute to the achievement of the DUHS's vision, mission, and core values
- Be developed in a participative and collaborative manner and shared with all key stakeholders
- Reflect high but achievable and realistic aspirations as well as demonstrate creativity and innovation in setting forth goals and strategic thrusts for the University

- Be based on measurable goals and strategies and include appropriate performance metrics
- Take into consideration available resources
- Include a component on objective monitoring/evaluation

A key component of the planning process was its genesis and review by a knowledgeable and appropriately constituted Executive Strategic Planning Workgroup¹. This review process ensured that all plans were conceptually and structurally sound, demonstrate high aspirations, creativity and innovative thinking, and contribute to the accomplishment of overall University goals. Recognizing both the time constraints of the planning schedule and the diversity of issues faced by a rapidly expanding University, the overall intent of this process was to keep it as simple as possible and provide appropriate flexibility in achieving the stated goals.

Membership of the Executive Strategic Planning Workgroup:

- | | |
|---|-------------|
| • Professor Muhammad Saeed Quraishy
Vice Chancellor, DUHS | Chairman |
| • Professor Sohail Rao
Senior Advisor to the Vice Chancellor, DUHS | Coordinator |
| • Professor Zarnaz Wahid
Pro-Vice Chancellor, DUHS
Principal, Dow International Medical College | Member |
| • Professor Kartar Dawani
Pro-Vice Chancellor, DUHS | Member |

¹ Established on July 28, 2018; Memorandum issued by Office of the Registrar (Ref. #: DUHS/Reg./2018/-4439)

- Professor Amjad Siraj Memon Member
Principal, Dow Medical College
- Professor Shaheen Sharafat Member
Director, Dow Diagnostic Research & Reference Laboratory
- Professor Sumbul Shamim Member
Principal, Dow College of Pharmacy
- Professor Saba Sohail Member
Chairperson, Department of Postgraduate Studies
- Professor Shahjahan Katpar Member
Dean, Faculty of Dental Sciences
- Professor Sajida Qureshi Member
Head, Surgical Unit – V, Dow Medical College
Dr. Ruth K. M. Pfau Civil Hospital, Karachi
- Dr. Shehla Naeem Zafar Member
Director, Institute of Nursing
- Dr. Riaz Soomro Member
Associate Professor & Chairperson
Institute of Business & Health Management

Ad-HOC Members:

- Ms. Sanam Soomro Member
Director, Quality Enhance Cell, DUHS
- Mr. Muhammad Babar Member
Manager, Office of Strategic Development & Implementation, DUHS

SECTION II: VISION, MISSION AND VALUES²

One of the principal objectives of the strategic planning process was the articulation and communication of the fundamental purpose of the University. It is the construct within which challenges and opportunities are examined and analyzed, strategic issues framed, and strategic goals and thrusts articulated. It is also the process through which the plan is implemented and the lens which ultimately evaluates its effectiveness. The primary components of the University's purpose are its vision, mission and values.

VISION

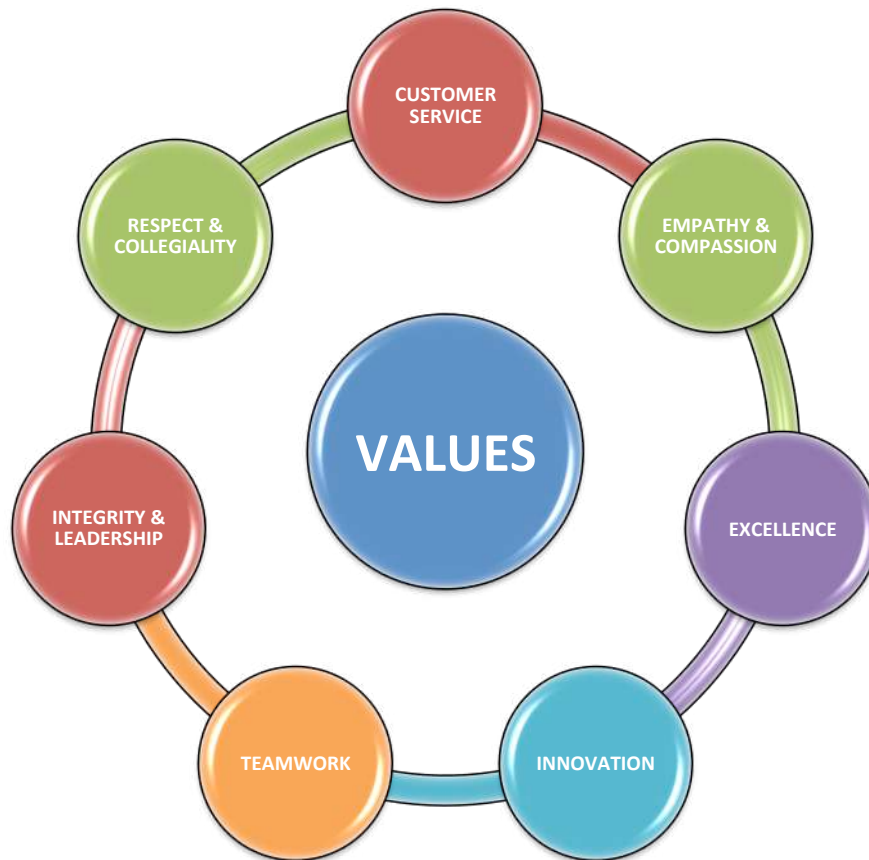
**To be a pre-eminent academic institution committed to
changing and saving lives**

MISSION

**Providing outstanding patient-centered education, training
and clinical care informed by cutting-edge research and
innovation generating and disseminating new knowledge**

² This Vision, Mission and Core Values were unanimously approved in the 75th meeting of the DUHS Syndicate on December 08, 2018 (Syndicate Resolution/Decision #: Syn-5/08-12-18/Item #4)

VALUES



- **CUSTOMER SERVICE**
 - Put patients & students first
- **EMPATHY & COMPASSION**
 - Understand before you judge
 - Be concerned for sufferings & misfortunes of others
- **EXCELLENCE**
 - Be the best and commit to exceptional quality and service

- **INNOVATION**
 - Encourage curiosity, imagine, create and share

- **TEAMWORK**
 - Engage & collaborate

- **INTEGRITY & LEADERSHIP**
 - Be a role model and influence others to achieve their best
 - Have the courage to do the right thing
 - Hold yourself and others accountable

- **RESPECT & COLLEGIALITY**
 - Be kind
 - Listen to understand
 - Value different opinions

SECTION III: ASPIRATIONAL INSTITUTIONS

Defining aspirational institutions of higher education provides the university with an opportunity to not only benchmark its performance but also clearly articulate the path that it wishes to pursue and its ultimate destination. It endows both internal and external stakeholders with the tool to continually evaluate an institution's progress towards accomplishing its goals using objective and measurable parameters. The University initiated this process of defining our aspirational peers by first recognizing that its primary responsibility is to impart quality education and training to students and to provide outstanding clinical care to our patients. This understanding was augmented by our desire to continue to develop appropriate capacity and infrastructure for research and scholarship in selected areas of interest that would enrich the educational experience of our students, inform delivery of quality clinical care and endow the University with the intellectual asset(s) to serve the community most judiciously. We used a number of different parameters to strategically ascertain our list of aspirational peers. In this regards, the University undertook a very diligent process of identifying the following aspirational peers who share our vision, mission and core values:

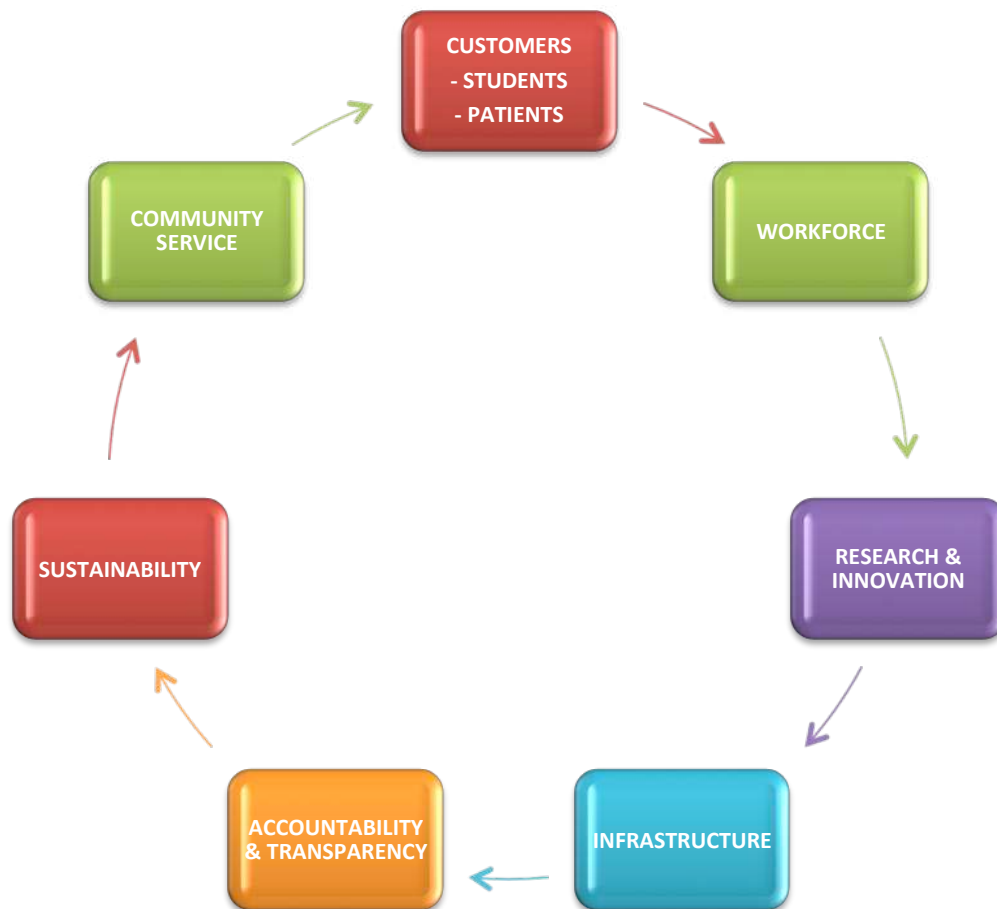
- The Aga Khan University, Karachi
- National University for Science & Technology, Islamabad
- Quaid-e-Azam University, Islamabad
- COMSATS University, Islamabad
- King Abdulaziz University, Jeddah, Kingdom of Saudi Arabia

The University fully recognizes that given its meteoric expansion, it does presently have majority of the required infrastructure and intellectual capacity to meet (and preferably exceed) the accomplishments of its aspirational peers. However, to

accomplish this outcome, it needs an executable Strategic Plan and the discipline to execute the same in a timely manner. It also appreciates the fact that it will take consistent and long-term effort on the part of the University to match the international credibility that our aspirational peer institutions have acquired over the course of decades of their existence. However, this does not dampen our enthusiasm and our resolve to work towards this goal and in that process, continue to improve the quality of our programs and services.

SECTION IV: STRATEGIC GOALS

Dow University of Health Sciences aspires to gain pre-eminence in education and training; selected areas of research and innovation; and deliver of world-class clinical care with local, regional and global impact. To accomplish these objectives and to use our available resources in the most judicious manner, we have identified the following strategic areas of emphasis for the next decade:



This comprehensive and expansive vision will be accomplished by the following goals:

- Goal I:** Impart quality undergraduate and postgraduate education that is student-centered, nationally and globally competitive and relevant to the delivery of 21st century healthcare
- Goal II:** Enhance capacity for research, innovation and dissemination of new knowledge in areas of strategic interest for the region
- Goal III:** Offer evidence-based patient-centered clinical care of the highest quality
- Goal IV:** Expand and sustain a mutually productive engagement with the local community
- Goal V:** Recruit, retain, educate and train quality workforce in strategic areas of need
- Goal VI:** Strategic development of innovative projects and programs that are of commercial importance and provide enduring fiscal sustainability
- Goal VII:** Develop and sustain an environment of administrative and fiscal responsibility, accountability, and transparency

Strategic Goal I: Impart quality undergraduate and postgraduate education that is student-centered, nationally and globally competitive and relevant to the delivery of 21st century healthcare

The outstanding quality and reputation of a University's academic enterprise is one of its greatest strengths. Regrettably, it is also most at risk in any institution of higher learning, which, if not managed effectively, can have irreparable and undesirable consequences for its students. DUHS is committed to continue to wield extraordinary attention to this goal and will develop and implement strategic plans at the level of individual faculties, colleges, schools, institutes, administrative, and service units that ensures that our students are provided with premier education that is relevant and impart transformative experience. To satisfy these requirements, the University will:

A: UNDERGRADUATE EDUCATION & TRAINING:

- Modify existing curriculum to impart 21st century education and training to students in various disciplines
- Implement evidence-based methodology for educating and teaching students and ensure that the faculty is adequately trained
- Provide opportunities for students in various disciplines to engage in research and scholarship and facilitate generation of new knowledge – cultivate *LIFE-LONG LEARNERS*
- Facilitate measured integration of various disciplines to enhance multidisciplinary education and training of students
- Develop testing capabilities that truly measure students core knowledge of their relevant discipline

- Gradually and systematically obtain/sustain accreditation of various academic programs from discipline-specific national and international organizations
- Create and support globally competitive, market-relevant and distinctive academic programs and faculties that address the changing needs of the region
- Provide increased access to quality higher education for selected undergraduate students who demonstrate the aptitude to succeed
- Enhance and expand the talent pool by shaping the enrollment profile of University's student body to reflect that found at our aspirational peer institutions
- Mandate delivery of instruction in English to develop and sustain a globally competitive environment
- Introduce courses on the philosophy and science of ethics and morality in all programs
- Create Smart Classrooms by introducing innovative technologies involving interactive digital boards, learning management system, auto video/audio recording of lectures, etc.
- Create and support student exchange programs with national and international accredited universities
- Ensure that international students are exposed to and prepared for shelf exams ensuring their successful integration in their country of origin
- Recruit and retain world-class faculty who are engaged in innovative approaches to education and training that integrates interdisciplinary research and scholarship

- Benchmark performance of various academic programs against our aspirational institutions
- Continue to provide opportunities for our junior faculty to obtain postgraduate education and training in selected areas of University's interest

B: POSTGRADUATE EDUCATION & TRAINING:

In addition to those outlined above [Section 5, Goal I (A)], specific action items related to postgraduate education and training are delineated below:

- Create optimal infrastructure for oversight of programs that meets HEC, PMDC, CPSP and international standards
 - Establish a School of Postgraduate Studies with relevant infrastructure³
- Initiate PhD programs in selected disciplines that have appropriate accreditation and have adequate number of HEC approved PhD supervisors⁴
- Modify the admission process for review, selection and enrollment of qualified applicants in PhD program by establishing a Doctoral Admission Committee²
- Review all existing programs and evaluate their value/relevance to University's Strategic Plan 2030
- Identify/recruit faculty with required education and training to serve as supervisors and co-supervisors

³ The formation of the School of Postgraduate Studies and the Doctoral Admission Committee were unanimously approved during the 78th meeting of the DUHS Syndicate held on July 13, 2013

⁴ PhD admission in selected disciplines (Pharmacology, Genetics, Biotechnology, Biochemistry and Microbiology) was announced for Fall 2019

- Streamline the process for submission/approval of thesis/synopsis and for obtainment of IRB approvals for clinical studies
- Create scholarship programs to recruit and retain meritorious students – *obtainment of required score in Graduate Admission Test must be a prerequisite for admission*
- Develop competitive intramural research funding program – *VICE CHANCELLORS' SEED FUNDING INITIATIVE (VCSFI)*⁵
- Ensure that students complete their program within designated period of study
- Implement HEC rules and regulations regarding the number of masters and doctoral students supervised by various supervisors
- Develop national and international collaborations and encourage and support students to avail of these opportunities
- Develop joint degree programs with national and international institutions

⁵ The first round of VCSFI was announced on March 30, 2019 and the grants were awarded as of July 01, 2019

Strategic Goal II: Enhance capacity for research, innovation and dissemination of new knowledge in areas of strategic interest for the region

The University has already identified imparting quality education and training to students as its primary objective. To further enhance this strategic goal; to enrich the learning experience of our students; to innovate and create new commercially viable intellectual property; and to recruit and retain highly qualified faculty and staff, the University will continue to emphasize the importance of research and innovation in selected and strategic areas of interest. It is University's aspiration to lead generation and dissemination of new knowledge in the region and to serve as an inspiration and role model for other public and private institutions of higher education in Pakistan.

To accomplish this goal and to continue to enhance interdisciplinary research and scholarship, the University and its individual academic and non-academic units will:

- Fully establish Office of Research, Innovation and Commercialization with intellectual assets to undertake its primary objective of facilitating generation of new knowledge, innovation, development of patents, creating opportunities for commercialization and enhancing public-private partnerships
- Identify "SIGNATURE" areas of excellence in research and provide adequate support for the development of these programs
- Create optimal infrastructure to minimize redundancies, encourage collaboration and facilitate research, innovation and commercialization across disciplines

- Reconstitute Institutional Review Board and its processes to meet the standards outlined by the Association for the Accreditation of Human Research Protection Programs (AAHRPP)
- Establish Institutional Animal Care and Use Committee to meet the standards outlined by the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC)
- Develop an administrative infrastructure that facilitates the conduct of basic, translational and clinical research in the University
- Minimize assignment of talented faculty to undertake administrative responsibilities
- Identify and recruit foreign educated and trained faculty in targeted areas of research
- Create and support faculty exchange program with national and international universities
- Encourage interdisciplinary research through competitive intramural funding of outstanding research proposals – *VICE CHANCELLORS' SEED FUNDING INITIATIVE*⁶
- Encourage obtainment of competitive and collaborative extramural grants and contracts from national and international funding agencies
- Encourage and support faculty and students to attend and present at national, regional and international meetings
- Establish mutually productive affiliations with national and international pharmaceutical and device manufacturers to initiate translational and clinical research

⁶ The first round of VCSFI was announced on March 30, 2019 and the grants were awarded as of July 01, 2019

- Develop and deliver educational programs/workshops to enhance the knowledge and skills of faculty, staff and students involved in research and scholarship
- Establish state-of-the art electronic and print library facilities with access to latest scientific journals and publications
- Facilitate the establishment of “endowed” chairs in the areas of Signature research programs
- Continue to improve the quality and impact factor of the Journal of DUHS
- Continue to further develop core research facilities both for DUHS faculty and students as well as for external partners and collaborators
- Encourage public-private partnership to establish DUHS Research Park
- Continue to enhance Advanced Animal Laboratories and Animal Care Facilities

Strategic Goal III: Offer evidence-based patient-centered clinical care of the highest quality

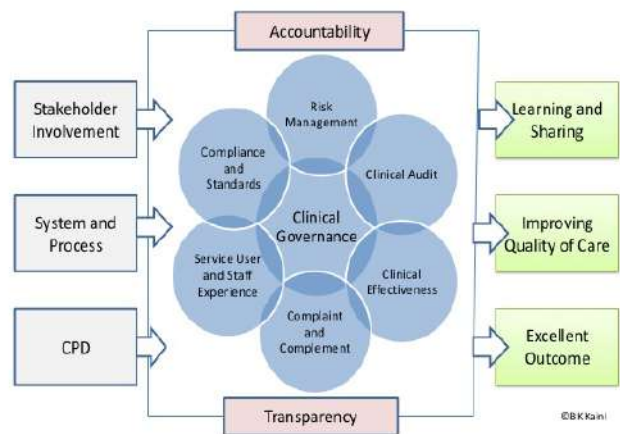
As the largest healthcare system in the country, active participating in the creation of healthy sustainable communities is one of the foremost strategic goal of the University. While developing strengths in all disciplines of health care, it is the University’s primary objective to be recognized nationally and internationally for unparalleled excellence in relevant “niche” areas, which offers world-class clinical care with outstanding research and educational opportunities. To continue to service this strategic goal, achieve clinical effectiveness and to meet the healthcare needs of our communities, the clinical units engaged in this process and the University will:

- Ascribe to the six (6) pillars of clinical governance which includes risk management; clinical audit; clinical effectiveness; complaint & complement; service user (patient) and staff experience; and compliance and standards (see figure)

- Create an integrated interdisciplinary tertiary care health system anchored by the Dow University Hospital – Dow University Healthcare System that includes:

- Dow Institute of Radiology
- Dow Diagnostic Research & Reference

Clinical Governance Framework



CPD: CLINICAL PROFESSIONAL DEVELOPMENT

Laboratory

- OJHA Institute of Chest Diseases
- Dr. Abdul Qadeer Khan Institute of Behavioral Sciences
- Institute of Physical Medicine & Rehabilitation
- Continue to improve the quality and access to clinical care provided by various facilities/service lines
- Minimize human error by developing and implementing Standard Operating Procedures that meets international guidelines
- Recruit, retain and encourage advanced education and training of qualified clinical faculty and staff
- Support the development and timely start-up of state-of-the-art Trauma Center
- Establish the first
- Implement HCAHPS (Hospital Consumer Assessment of Healthcare Providers & Systems) across all facilities/service lines offering clinical care
- Develop clinical affiliation with national and international Joint Commission accredited healthcare facilities to embrace best practices and to provide evidence-based patient-centered clinical care
- Successfully obtain national and international accreditation of various facilities and service lines
- Create new and improve existing postgraduate training programs in various clinical disciplines
- Upgrade existing and develop new facilities for optimal delivery of clinical care
- Ensure that the University continues to provide low-cost clinical care to the poor and the underserved population

- Establish a Department of Population Health – *be a leader in improving the health of the community that the University serves*
- Identify and minimize social determinants of health that have an overall negative impact
- Create an Office of Quality and Safety to serve the entire healthcare system
- Improve financial outlook for individual facilities as well as the integrated healthcare system
- Transition the culture from volume-based to value-based clinical services
- Establish an Office of Nursing Education and Training to continue to improve the skills of nursing staff⁷
- Develop real-time performance metrics for various clinical services and review them in Weekly/Monthly Operating Rounds
- Improve the process for procurement and supply chain of medical devices and drugs
- Create effective and highly dependable e-platforms for in-patient and outpatient management; pharmacy; emergency room; nursing, etc.

⁷ Office of Nursing Education & Training at Dow University Hospital was established on June 01, 2019 in partnership with the Institute of Nursing

Strategic Goal IV: Expand and sustain a mutually productive engagement with the local community

DUHS is committed to the welfare of the communities that it serves. The University takes this strategic goal very seriously and has a critically important public mission to help address societal needs through education, research and scholarship, and service. In this regards, the University and its various academic, clinical and administrative units will:

- Establish a unified Institutional structure to facilitate and promote community engagement
- Encourage and reward faculty, staff, and student's to volunteer their services in the community
- Develop continuing education programs to address identified and emerging educational and technological needs of the community
- Participate in projects related to the economic and social development of the local communities
- Participate in creating and implementing programs with local and regional agencies to ensure environmental sustainability
- Create an efficient, accessible and sustainable healthcare program that is specifically tailored to address existing and emerging community needs
- Participate in improving the quality of education in elementary, middle and secondary levels – *improving the prospect and the pipeline of future student applicants*
- Leverage emerging opportunities for meaningful engagement with local and national communities

- Provide consultancy services in the areas of education, healthcare, management, etc., to public and private institutions
- Establish a volunteer committee of faculty, staff and students for creating a “GREEN” University City at OJHA campus

**Strategic Goal V: Recruit, retain, educate and train quality workforce
in strategic areas of need**

The most important asset of a university is its faculty and staff who serve the vision and mission of the institution. As such, all efforts should be expended to:

- Establish a functional and fully endowed Directorate of Human Resources⁸
- Streamline recruitment and reassignment process for faculty and staff
- Enhance education and training of selected faculty and staff – *make professional development a centerpiece of University's workforce strategy*
- Identify, recruit and retain qualified faculty and staff in strategic areas of need
- Develop a process to undertake background checks; validation of degrees /diplomas; medical check-up; and obtainment of references for every faculty and staff employed
 - Implement a similar process for existing employees in a gradual and systematic manner
- Develop meaningful job descriptions for academic, clinical and administrative positions
- Conduct bi-annual performance evaluation with accountability, transparency and confidentiality
- Create an incentive plan for faculty and staff who exceed performance expectations
- To the extent possible, minimize recruitment of faculty and staff using third-party contractors

⁸ The establishment of the Secretariat for Human Resources was unanimously approved by the DUHS Syndicate in its 78th meeting on July 13, 2019 via Resolution/Decision #: Syn-78/13.07.2019/Item 16

- Ensure that MERIT is the only factor used in recruitment and/or retention of quality faculty and staff
- Conduct evaluations across the board for staffing needs, skills, experience and suitability of the existing staff assigned to various academic, clinical and administrative units

Strategic Goal VI: Strategic development of innovative projects and programs that are of commercial importance and provide enduring fiscal sustainability

Development and maintenance of teaching, training and clinical care facilities and infrastructure is a daunting financial task for any institution of higher education. This fact gets compounded in research-intensive institutions that have to perennially “invest” in this mission to ensure its long-term viability and productivity. For an Institution such as DUHS, which has relatively low tuition and provides low-cost clinical care, financially sustaining its core mission is critical. It is therefore important that the University strategically engages in projects and/or programs that have positive financial return on investments to ensure its sustainability and continued growth in the academic world. To facilitate the timely accomplishment of this strategic goal, the University is committed to:

- Establish Dow Institute for Advanced Molecular Genetics & Genomics (IAMG²) – *the first such entity in Pakistan*
- Continue to develop Advanced Animal Facilities/Laboratory to serve the needs of investigators in the University as well as regional and national research institutions
- Office of Research, Innovation & Commercialization should function as an incubator for generation of new patents and intellectual property that is of commercial value
- Continue to expand technology and infrastructure in the Dow Research Institute of Biotechnology & Biomedical Sciences (DRIBBS) to create a world-class core research facility for generation of new knowledge, development & submission of competitive grant applications to extramural

funding agencies and for collaboration with national and international partners

- Create partnerships and collaborations with regional and national research institutions, pharmaceutical industry, device manufacturers and other such commercial entities for use of resources at DUHS on a fee-for-service basis
- Develop a DUHS Research Park as a public-private partnership
- Create an Office of Consultancy and offer its services to public and private institutions in Pakistan in the areas of education, research, clinical care, healthcare management, public health, etc.
- Continue to evaluate market-specific needs in healthcare and develop projects/programs to meet those needs such as Human Serum Production Facility, etc.

Strategic Goal VII: Develop and sustain an environment of administrative and fiscal responsibility, accountability, and transparency

As a rapidly growing Institution, DUHS is committed to developing a sustainable and accountable academic, administrative and fiscal infrastructure that adequately services its vision and mission. It is extremely important to realize that the Universities serve not only as a beacon of knowledge but also as a “role” model for the community by creating efficiencies in administrative, fiscal, human resources and other ancillary services. In this regard, the University is committed to:

- Develop a culture of service and accountability with defined outcomes and consequences
- Streamline the administrative processes to adequately service the needs of its faculty, staff, and students
- Ensure that administrative, financial and service units are staffed by knowledgeable, competent, and experienced individuals
- Establish a Center for Staff Development that provides training on issues such as:
 - Customer Service
 - Career Development
 - Professionalism
 - Conflict of Interest
 - Nepotism
 - Interpersonal Skills, etc.

- Establish an Orientation Program for all newly recruited faculty and staff which provides them with information about the Institution, its various academic, clinical and administrative units and the desired level of performance
- Develop an efficient and effective processes and infrastructure within various service units:
 - Human Resources
 - Finance and Accounting
 - Capital Development
 - Facilities
 - Procurement & Supply Chain
 - Information Technology
 - Student Admissions
 - Examination, etc.
- Create a University-level and an individual unit-level budget that recognizes and supports the timely accomplishment of strategic goals;
- Develop and/or implement an innovative, effective and user-friendly electronic platform for the timely and “Point of Service” delivery of clinical, educational, administrative and financial services
- Establish DUHS Office of Strategic Development & Implementation⁹ to assist with the development of Strategic Plans by respective academic and non-academic units and its integration and alignment to service the measured outcomes of the University’s Master Strategic Plan. Additionally, this Office will also be responsible for facilitating implementation of the Master Strategic Plan 2019-2030 and generation of timely reports

⁹ The establishment of the Office of Strategic Development & Implementation was unanimously approved by the DUHS Syndicate in its 78th meeting on July 13, 2019

- Improve marketing efforts and continue to enhance “BRAND” awareness
- Redesign DUHS website to meet industry standards ensuring that it is informative and user-friendly – *web presence is the digital business card for the world*
- Adopt tools for Business Intelligence to manage complex administrative and financial needs and to generate predictive models
- Fully implement Microsoft Dynamics 365 to gain maximum advantage of its built-in intelligence to ensure timely and personalized services to meet the needs of each academic, clinical, and non-academic unit in the University

SECTION V: MEASURABLE OUTCOMES

The success of this Master Strategic Plan and our collective efforts to implement it in a timely manner would require a very high level of discipline, accountability and transparency. It also mandates display of an elevated intensity of professionalism and commitment from the leadership as well as the rank and file faculty, staff and students of DUHS to accomplish these goals. *It must be recognized that the University's Master Strategic Plan 2019 - 2030 is only a roadmap for the journey that its respective academic and non-academic units will pursue in the next decade.* The development and implementation of the Strategic Plan by individual entities within the University is well underway and will ultimately determine how their individual and collective efforts have shaped the future of this University. The 17 key major measured outcomes for the University Master Strategic Plan 2019 - 2030 are iterated below and detailed in Appendix A:

1. To be among the Top 500 universities in Quacquarelli Symonds (QS) World University Rankings by Subject – Life Sciences & Medicine
2. Accreditation and Approval of ALL Bachelors degree programs from relevant accrediting agencies
3. Accreditation/Approval of ALL Master and PhD degree programs from relevant accrediting agencies
4. Increase the number of PhD awarding degree programs in relevant disciplines
5. Increase the number of PhD students graduating from the University
6. Increase the number of HEC-approved PhD supervisors
7. Increase scientific publication in journals with impact factor an indexed journals
8. Increase competitive extramural funding
9. Increase patents and intellectual property

10. Create opportunities for commercialization of patents
11. Create mutually productive public-private partnerships in research & innovation
12. Create endowed chairs of Excellence and Basic and Clinical Sciences
13. Establish formal academic collaborations/partnerships with national and international universities and research centers
14. Periodically assess and report in a timely manner student satisfaction
15. Periodically assess and report in a timely manner student satisfaction
16. As a responsible participant in preserving our climate, the University will strive to be:
 - Among the top 300 World's Most Sustainable University – UI Green Metric World University Rankings
 - Among the top 10 Most Sustainable University in Pakistan – UI Green Metric World University Rankings

List of non-academic and administrative units within DUHS that are REQUIRED to develop their respective Strategic Plan that is supportive of and corresponding with the University Master Strategic Plan 2019 – 2030 is provided below:

1. Dow University Hospital
2. Dow Institute for Radiology
3. Dow Diagnostic Research & Reference Laboratory
4. OJHA Institute of Chest Diseases
5. Dr. Abdul Qadeer Khan Institute for Behavioral Sciences
6. Institute for Physical Medicine & Rehabilitation
7. Quality Enhancement Cell
8. QUALITY ENHANCEMENT CELL
9. Dow Research Institute of Biotechnology & Biomedical Sciences

10. Advanced Animal Laboratory
11. Office of Research, Innovation & Commercialization
12. Directorate of Human Resources
13. Directorate of Finance
14. Directorate of Information & Communication Technology
15. Directorate of Examination
16. Directorate of Admission
17. Professional Development Center
18. Dow Institute for Health Professional Education
19. Office of Alumni Affairs & Resource Mobilization
20. Office of Procurement & Supply Chair
21. Office of Planning & Development
22. Office of Student Counseling & Advising

SECTION VI: RESOURCE PLANNING FOR ACHIEVING STRATEGIC GOALS

It is evident that the universities that have a vision for excellence and have the necessary resources (human, financial, physical, and technological) to reach their goals are the ones that will succeed in the future. It is therefore clear that the University will need to maximize the effective and efficient use of its current resources as well as to continue to identify new sources and partnerships if it is to be among the best in the nation.

The resources needed to execute the University's strategic plan will have to be very carefully earmarked for projects that are deemed a priority for the obtainment of our strategic goals. In other words, this Master Strategic Plan will guide, influence and inform the allocation of funds to projects that support the vision, mission and values of the University. In this regard, the University will:

- Establish priorities for expenditures that are informed and guided by the University's Master Strategic Plan
- Make the most efficient use of current resources by:
 - Streamlining functions and creating a synergistic organization
 - Cost containment and reduction
 - Productivity enhancement
 - On-going reallocation and redeployment of resources (particularly in Humans Resources)
- Enhance extramurally funded research activity
- Create alternative sources of funding through new and innovative undergraduate and postgraduate programs, venture capital investments in collaborative projects, philanthropy, donations, etc.,

- Employ state-of-the-art accounting (Generally Accepted Accounting Principles; GAAP) principles to streamline critical functions of the Finance Directorate

SECTION VII: IMPLEMENTATION AND MONITORING OF STRATEGIC PLAN

A strategic plan is only as good as its implementation and execution. Unfortunately, many plans fail on this account. As a result, the University will be extraordinarily vigilant and transparent in monitoring the implementation efforts set forth in the plans, reporting results, and taking corrective actions and measures as and when necessary to ensure success. Initially, an important part of this effort will be to facilitate the development of strategic plans by respective academic and non-academic units in the University that are aligned with the DUHS's Master Strategic Plan 2019 – 2030. Subsequently, providing oversight of timely execution of these individual plans employing meaningful indicators of progress (KPI: Key Performance Indicators) towards the accomplishment of goals articulated in the University's Master Strategic Plan would be essential. It is understood by necessity that these KPI's will be evaluated periodically in the course of execution of the Strategic Plan.

Reports to the Vice Chancellor, University Senate and Syndicate and other stakeholders utilizing indicators and/or metrics of progress will be made on a regular and on-going basis. These reports will also influence and guide the execution of the Master Strategic Plan and timely accomplishment of the milestones. To conduct this process in a fair and transparent manner, the University has established an independent Office of Strategic Development and Implementation (OSDI)¹⁰, which report directly to the Vice Chancellor, DUHS.

¹⁰ The establishment of the Office of Strategic Development & Implementation was unanimously approved by the DUHS Syndicate in its 78th meeting on July 13, 2019

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APPENDIX A:

KEY MEASURED OUTCOMES FOR DOW UNIVERSITY HEALTH SCIENCES MASTER STRATEGIC PLAN 2019 - 2030



MASTER STRATEGIC PLAN 2019 - 2030: KEY OUTCOMES

MEASURED OUTCOMES		RESPONSIBLE OFFICE		ACADEMIC YEARS																	
				2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030					
AMONG THE TOP 500 UNIVERSITIES IN QUACCIARELLI SYMONDS (QS) WORLD UNIVERSITY RANKINGS BY SUBJECT - LIFE SCIENCES & MEDICINE	LEAD	FACILITATION		DATA NOT SUBMITTED	DATA SUBMITTED AWAITING RANKING	DETERMINED BASED ON 2019 RANKING	DETERMINED BASED ON 2019 RANKING	DETERMINED BASED ON 2019 RANKING	DETERMINED BASED ON 2019 RANKING	DETERMINED BASED ON 2019 RANKING	DETERMINED BASED ON 2019 RANKING	DETERMINED BASED ON 2019 RANKING	DETERMINED BASED ON 2019 RANKING	DETERMINED BASED ON 2019 RANKING	DETERMINED BASED ON 2019 RANKING	DETERMINED BASED ON 2019 RANKING	DETERMINED BASED ON 2019 RANKING	DETERMINED BASED ON 2019 RANKING	DETERMINED BASED ON 2019 RANKING		
	QEC	VCS, OSDI																			
ACREDITATION/APPROVAL OF BACHELORS DEGREE PROGRAMS COLLEGES, SCHOOLS & INSTITUTES	INDIVIDUAL COLLEGES, SCHOOLS & INSTITUTES	QEC, OSDI		85%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
ACREDITATION/APPROVAL OF MASTER & PHD DEGREE PROGRAMS	SCHOOL OF POSTGRADUATE STUDIES	QEC, OSDI		57%	75%	95%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
NUMBER OF PHD DEGREE PROGRAMS	SCHOOL OF POSTGRADUATE STUDIES	QEC, OSDI		20	20	25	25	28	31	35	38	40	40	40	40	40	40	40	40	40	
NUMBER OF PHD STUDENT GRADUATING FROM THE UNIVERSITY	SCHOOL OF POSTGRADUATE STUDIES	QEC		2	OPENED ENROLLMENT IN FIVE PHD PROGRAMS IN 2019; WITH THE APPROVAL OF THE ACCREDITING BODY, ADDITIONAL PHD PROGRAMS WILL BE OPENED FOR ENROLLMENT																
NUMBER OF HEC-APPROVED PHD SUPERVISORS	SCHOOL OF POSTGRADUATE STUDIES	ORIC		35	45	50	50	55	55	60	60	65	65	65	65	65	65	65	65	65	
SCIENTIFIC PUBLICATIONS IN JOURNAL WITH IMPACT FACTOR	ORIC	OSDI		1.40	1.75	2.00	2.25	2.50	2.75	2.90	3.00	3.10	3.25	3.35	3.40	3.45	3.50	3.50	3.50	3.50	
EXTRAMURAL FUNDING (PKR MILLIONS/YEAR)	ORIC	OSDI		3.9	4.5	5	5.5	6	6.5	7	7.5	10	12	13	15	15	18	18	18	18	
PATENTS & INTELLECTUAL PROPERTY	ORIC	OSDI		0	0	2	2	4	6	6	8	8	10	10	12	12	12	12	12	12	
COMMERCIALIZATION OF LICENSED PATENTS	ORIC	OSDI		0	0	0	0	1	1	2	2	4	4	6	6	8	8	8	8	8	
PUBLIC-PRIVATE PARTNERSHIPS IN RESEARCH & INNOVATION	ORIC	OSDI		2	3	4	4	6	8	8	8	10	10	12	12	12	12	12	12	12	
ENDOWED CHAIRS OF EXCELLENCE IN BASIC AND CLINICAL SCIENCES	VCS	OFFICE OF ALUMNI AFFAIRS		0	1	2	3	3	4	4	5	5	6	6	7	7	8	8	8	8	
FORMAL ACADEMIC COLLABORATION/PARTNERSHIP WITH INTERNATIONAL UNIVERSITIES/RESEARCH CENTERS	VCS	OSDI		3	5	5	7	7	10	10	10	12	12	12	15	15	15	15	15	15	
STUDENT SATISFACTION	INDIVIDUAL COLLEGES, SCHOOLS & INSTITUTES	QEC, OSDI, STUDENT AFFAIRS		NOT DETERMINED	DEVELOP & IMPLEMENT SURVEY	DETERMINED BASED ON 2019 DATA	90%	90%	90%	90%	92%	94%	95%	95%	95%	95%	95%	95%	95%	95%	
FACULTY & STAFF SATISFACTION	HUMAN RESOURCES	QEC, OSDI		NOT DETERMINED	DEVELOP & IMPLEMENT SURVEY	DETERMINED BASED ON 2019 DATA	65%	70%	70%	75%	80%	85%	90%	92%	94%	95%	95%	95%	95%	95%	
AMONG THE TOP 300 WORLD'S MOST SUSTAINABLE UNIVERSITY - UJ GREEN METRIC WORLD UNIVERSITY RANKINGS	VCS	PD, RD		688	600	550	400	390	385	350	340	325	310	300	300	300	300	300	300	300	
AMONG THE TOP 10 MOST SUSTAINABLE UNIVERSITY IN PAKISTAN - UJ GREEN METRIC WORLD UNIVERSITY RANKINGS	VCS	PD, RD		25	22	18	15	13	10	10	10	10	10	10	10	10	10	10	10	10	

GLOSSARY:

- VCS: VICE CHANCELLOR'S SECRETARIAT
- QEC: QUALITY ENHANCEMENT CELL
- OSDI: OFFICE OF STRATEGIC DEVELOPMENT & IMPLEMENTATION
- ORIC: OFFICE OF RESEARCH, INNOVATION & COMMERCIALIZATION
- PD: PROJECT DIRECTOR
- RD: RESIDENT DIRECTOR

APPENDIX B

KEY PERFORMANCE INDICATORS BY MISSION 2019 – 2023

