2001


Aga Khan University

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PROGRESS REPORT
2000-2001
Aga Khan Development Network

**Aga Khan University** is part of Aga Khan Development Network, a group of private international development agencies, founded by His Highness the Aga Khan, which work in the developing countries of Asia and Africa. Aga Khan Foundation focuses on rural development, health, education, and the enhancement of non-governmental organisations. Its programmes include Aga Khan Rural Support Programmes and Mountain Societies Development Support Programme. Aga Khan Education Services operates more than 300 schools and advanced educational programmes at the pre-school, primary, secondary and higher secondary levels in Pakistan, India, Bangladesh, Kenya, Uganda, Tanzania and Tajikistan. Aga Khan Health Services, with 325 health centres, dispensaries, hospitals, diagnostic centres and community health outlets, is one of the most comprehensive non-profit health care systems in the developing world. Aga Khan Planning and Building Services provides material and technical assistance to many rural and urban areas in Asia and Africa. Aga Khan Fund for Economic Development works to strengthen the role of the private sector in developing countries by promoting entrepreneurial activity and supporting private sector initiatives. The University of Central Asia, based in Khorog, Tajikistan, the world’s first university dedicated exclusively to education and research on mountain regions and societies, is also part of the Network.

For further information, readers are invited to visit Aga Khan Development Network website at [www.akdn.org](http://www.akdn.org)
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This is an important moment in the history of AKU for a number of reasons. The first is that AKU has become a genuinely national institution. It is engaged in addressing national needs by developing high quality human resources in the fields of health and education, engaging in problem-oriented research, working with government on policy issues, and reaching out to become directly involved in upgrading the delivery of critical social services at the local and regional levels. The second is that, with the decision to establish the College of Arts and Sciences (now known as Faculty of Arts and Sciences), AKU will take the major step of moving beyond professional education toward becoming a comprehensive university in its classical form. The third is that the establishment of the Advanced Nursing Programme in East Africa, and of the Institute of Islamic Civilisations (now known as Institute for the Study of Muslim Civilisations) in London, give life to the University as a Pakistani institution with an international mandate, reaching out as an expression of Pakistan into the international community.

Chancellor His Highness the Aga Khan
13th Convocation of Aga Khan University
Karachi, October 2000
Foreword

In a region undergoing major social and political adjustments, Aga Khan University (AKU) - an important component of Aga Khan Development Network (AKDN) - is an agent of change. Through its high academic standards in programmes relevant to the needs of a developing society, its work as a dialogue partner with government on issues of health and education policy, and its delivery of critical social services at the local and regional levels, AKU is exerting a national impact in Pakistan. In the last two years, with the launch of academic programmes outside Pakistan, it has established itself as an international institution.

This review of AKU’s progress in 2000-2001 highlights important new initiatives and developments that go towards realising the vision of the University’s founder, His Highness the Aga Khan. It covers the establishment, at the request of the respective governments, of an Advanced Nursing Studies programme in Uganda, which is to be followed soon in Kenya and Tanzania. The programme will upgrade the skills and career development opportunities of in-service nurses. Also in East Africa, AKU’s Institute for Educational Development is in the process of setting up Professional Development Centres to enhance the skills of teachers and school administrators in the region. The review describes the planning processes leading to the establishment of an Institute for the Study of Muslim Civilisations in London, UK, in 2001. This new Institute will give expression to the University’s Muslim identity in an international context, focusing on educational programmes and research on the contributions made by Islamic civilisations to modern society. Finally, the review tells how the University’s medical and nursing alumni are returning from graduate studies overseas and establishing themselves as contributing members of AKU faculty.

To meet the expanding needs of existing programmes and the demand for new education and service initiatives, important new buildings have been built on the Health Sciences campus in Karachi over the past two years. Construction also began on other new facilities. The Chancellor, His Highness the Aga Khan, inaugurated the Juma Building for research, which incorporates Pakistan’s first Bio-Safety Level III laboratory, and the Ibn Ridwan Building for Community Health Sciences. A Sports and Rehabilitation Centre was commemorated.
and the foundation stone was laid for the Nazerali-Walji Ambulatory Care Building. Construction was begun on the Khimji Cardiac Care Building, and plans were nearing completion for the new Women's Residences to house professional women seeking the secure environment of the University campus.

The University is grateful for the generosity of its donors in Pakistan and around the world for their support, for these facilities, as well as the many young people who contributed to the new Sports and Rehabilitation Centre.

While the programmes of the University continue to expand, and new buildings are constructed to accommodate them, great care is taken to ensure the maintenance and strengthening of existing programmes and activities. In the Medical College and the School of Nursing, the high standards of teaching and scholarship that have become a hallmark of AKU continue to exert a positive impact on the quality of care in its associated teaching facility, Aga Khan University Hospital (AKUH).

The ISO 9002 certification received in 1999 for six departments of AKUH, has now been extended to the entire facility, making AKUH the first teaching institution in Pakistan and one of the few in the world to receive this distinction. This gives us a solid foundation for aiming at the more important quality benchmark of the Joint Commission International’s Certificate of Accreditation in 2003.

A recent development of great significance is the decision by the Chancellor and the Board of Trustees to establish Aga Khan University Faculty of Arts and Sciences, on a new 400-acre campus in Karachi. While the inauguration is some years away, conceptualisation and planning of this new faculty has begun in earnest. With this decision, and following the Chancellor's gift in 2000 of Rs. 1,230 million (US $20.5 million) for its planning activities including acquisition of land, AKU has taken the major step of moving beyond professional education towards becoming a comprehensive university in its classical form.

As both a national and international institution, AKU faces many challenges. Yet, in spite of the geo-political situation and the ongoing challenge of recruiting and retaining faculty and staff, it continues to move forward while maintaining the quality of its existing educational and several research programmes. The achievements and initiatives described in these pages are a tribute to the vision of the University's Chancellor; the wisdom of its Board of Trustees; the dedication of its faculty and staff; the cooperation of its many partners in other universities and agencies, including AKDN; and the devotion of its many volunteers and donors. It is to their credit that AKU strives to be a source of hope and enlightenment in the developing world.

Shamsh Kassim-Lakha, S.J.
President
Founded by His Highness the Aga Khan and chartered in 1983 as Pakistan’s first private university, AKU’s objective is to promote human welfare in general, and the welfare of the people of Pakistan in particular, by disseminating knowledge and providing instruction, training, research and service in the health sciences, education and such other branches of learning as the University may determine. It occupies a pivotal place within Aga Khan Development Network.

Through its Medical College, School of Nursing and teaching Hospital, its Institute for Educational Development and now through its Institute for the Study of Muslim Civilisations, the University educates while contributing to the development of the areas in which it operates.

A University Open to All

AKU is a non-denominational institution open to all, irrespective of religion, ethnicity, gender or national origin. Forty-four percent of the University’s faculty are women, many in senior posts. Fifty percent of students in the Medical College are also women. The University’s admissions policy is needs-blind and based on merit. Over 33 percent of the students receive financial aid.

The University's Impact

The University’s programmes have contributed to improving the lives of the people in Karachi and beyond. One programme developed in Karachi’s “katchi abadis” (squatter settlements), has resulted in halving infant mortality at an annual cost of Rs. 240 (US $4) per child, a decline several times the rate in comparable non-intervention areas. The leading causes of infant and child death are related to factors such as poor antenatal nutrition, unsafe deliveries, low immunisation coverage and inadequate supplies of potable water. These factors, therefore, have been the specific targets of AKU interventions through broad-based initiatives such as community leadership development, and training (formal and informal) of local practitioners, to more specific interventions such as water quality improvements, promotion of breast feeding, iron supplementation in pregnancy, promotion of family planning.
and improved immunisation coverage. This process, which was monitored and evaluated over the past decade, has produced valuable data and research.

AKU’s programmes are designed to have a multiplier effect, their impact growing in magnitude every year. The in-service teacher education programme, for example, may start with a relatively small number of teachers, but when those teachers in turn, train others, the impact is far greater. The University’s impact goes beyond numbers – the nursing programme has not only raised the status of the profession, but also the quality of overall care, and is being adopted and adapted by other universities in the country. At the same time, it has raised the status of women by providing positive role models.

**An Ethical Framework**

While the University sets its sights on the latest breakthroughs in health sciences and technology, as well as the application of well-proven and appropriate technologies that have been insufficiently applied in Pakistan, it also seeks to integrate systems of values, ethics and principles. In doing so, AKU is an important force for pluralism, teaching the skills of critical thinking, analysis and problem-solving, while inculcating moral reasoning, ethics and respect for others.

**Future Directions**

In its first two decades, AKU’s major focus was in the fields of health and education. In the decade ahead, the University plans to step beyond professional education towards becoming a comprehensive university.

Following the liberal arts model, a Faculty of Arts and Sciences will be established on a new campus in Karachi. It will develop skills in critical thinking and analysis, raise proficiency in verbal and written communication, enhance human resource development in the region, and advance understanding in particular academic disciplines.

Another programme under consideration is an Institute of Human Development, which will be dedicated to advancing the understanding of the effects and conditions of early childhood on subsequent well-being and performance, and the application of this understanding to the development of interventions and evaluation to assess their potential efficacy and applicability.

For further information, readers are invited to visit Aga Khan University website at www.aku.edu

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* Under planning
The Faculty of Health Sciences (FHS), which includes the Medical College and the School of Nursing, was planned with the support of Harvard, McGill and McMaster Universities. Both these educational components equip students for the practice of curative and preventive medicine, as well as for the many factors affecting the health of both individuals and communities. This holistic approach provides students with the skills necessary to address the health needs of the people of Pakistan and the developing world.

Medical College

The curriculum of the Medical College emphasises both medical care for patients with complex multiple pathologies and community-based primary care. Students acquire experience of clinical care in Aga Khan University Hospital (AKUH), and of primary care extensively in Karachi’s poorest neighbourhoods.

The first two years of the M.B., B.S. curriculum are devoted largely to the basic sciences, followed by three years of clinical education and training. Over the past three years, the faculty has worked strenuously to modify the course of study to incorporate problem-based learning with the integration of the teaching of basic, clinical and community health sciences.

This shift, in line with international practice, will use student-centred small group learning in addition to lectures, demonstrations and laboratory experiences. There will be an increased emphasis on elective and research experiences, communication and clinical skills. There will also be opportunities to study subjects in the humanities and social sciences as they relate to medicine. The new curriculum will be introduced in October 2002.
The Ph.D. programme in Health Sciences is the first of its kind in Pakistan. It consists of a first year of coursework, followed by three years of research leading to a thesis. Research opportunities exist in the areas of basic sciences, infectious diseases, nutrition, and cancer, amongst others. Nine students were enrolled in the programme in 2001.

Community-Based Health Sciences

The Medical College’s Department of Community Health Sciences (CHS) is a leader in community-based education in Pakistan. It works with communities in both urban and rural settings. It seeks to assist communities in developing their own leadership and resources so as to create self-sustaining health systems.

In early 1999, CHS concluded a two-year strategic planning process. As a result of this exercise, it now has four divisions and one special programme. The divisions are based on their disciplinary scope and their responsibility for formal education programme(s). The new divisions are: Epidemiology and Biostatistics, Family Medicine, Health Systems and Public Health Practice. In recognition of its special significance in overall public health in Pakistan, a special programme on Reproductive Health (RH) was also introduced.

Addressing the Need for Health Management Professionals

To address the urgent need for trained personnel in health management in Pakistan, AKU launched its new Master of Science (M.Sc.) programme in Health Policy and Management (HPM) in 2000. The two-year programme trains professionals to lead health systems research, assess and implement health and social sector policy, and strategically plan and manage health systems at all levels.

Over the past five years, CHS has developed a Rural Community Development Project (RCDP) in support of two communities in southern Sindh: Nara and Kirthar.
Faculty of Health Sciences

The programme is an initiative of CHS. Courses are integrated with those of the M.Sc. in Epidemiology and Biostatistics during the first year, and provide for emphasis on policy or management during the second. With its multidisciplinary faculty, the department is ideally placed and equipped for developing broadly based health professionals, expertise in health systems research, and active links with institutions within the public and private sectors. A special feature of the programme is a three-month training period at the end of the first year that provides exposure to relevant health service policies and management environments. The HPM programme is designed for an annual intake of 15 students.

Over the past five years, CHS has also developed a Rural Community Development Project (RCDP) in support of two communities in southern Sindh: the opening of a new health centre in Nara, and the upgrading of an existing facility in Kirthar.

Support to International Programmes

During 2000, CHS faculty supported health projects in Kenya, Tajikistan and northern Pakistan. It also helped the Expanded Programme on Immunisation in Afghanistan and the development of a national survey in Nepal. The CHS Continuing Education Programme (formerly Regional Training Programme - RTP) has provided continuing public health education to 721 participants in 42 courses. These include 132 trained in Kenya and 114 international participants from 11 countries.

School of Nursing

Established in 1980, Aga Khan University School of Nursing (AKU-SON) was the first academic component of AKU and its Faculty of Health Sciences. The School offers several programmes in nursing, including a three-year Diploma Programme, a four-year Generic B.Sc.N. and a two-year Post R.N., B.Sc.N. and Pakistan’s first Master of Science in Nursing (M.Sc.N.) which started in October 2001.

Since its inception, the School has played a leading role in establishing in Pakistan an internationally acceptable model for nursing education and practice, and has trained 1,586 nurses. The community-oriented values and high quality of education at the School have been pivotal in changing public perceptions towards the nursing profession and its role in health care, as well as enhancing its status on a national and regional level. The Canadian International Development Agency (CIDA) and McMaster University have provided valuable assistance to AKU-SON and continue to be its strategic partners.

Advanced Nursing Studies Programme Expands to East Africa

The University’s first academic initiative outside Pakistan, the Advanced Nursing Studies (ANS) programme, began in East
Africa in 2001. Developed at the request of the governments and nursing leaders of Kenya, Uganda and Tanzania, it is designed to improve the quality of patient care by encouraging practising nurses to enhance their expertise through the pursuit of higher education.

Innovative teaching methods and a modular curriculum characterise courses in nursing practice, research, education and management, and provide nurses with opportunities to acquire higher education without leaving their workplace.

In Uganda, following accreditation by the Ministry of Education in 2000, faculty and students were recruited and classes started in January 2001. In Kenya and Tanzania, the accreditation process is substantially under way, as are other activities including the acquisition, renovation and equipping of the academic facilities, and the initial recruitment of faculty and staff.

Important Landmark for Nursing Profession in Pakistan

Pakistan became the first Muslim country to achieve chapter status in the Sigma Theta Tau International (STTI) global network when, in 2000, Aga Khan University School of Nursing Honor Society received its Charter. STTI is an international honour society of nursing, with more than a quarter of a million members representing 94 countries. It has

Since its inception, the School of Nursing has played a leading role in establishing in Pakistan an internationally accepted model for nursing education and practice, and has trained 1,586 nurses.
406 chapters in colleges and universities in Australia, Canada, China, South Korea, Taiwan and the United States. This linkage is particularly significant because it assists in enhancing nursing education, research and practice in Pakistan.

Access to Education

The Educational Support Programme provides relief to those students who are unable to afford the highly subsidised tuition fees of the Medical College or the School of Nursing. At AKU, student fees pay for an average of only 23 percent of the cost of their education.

In 2001, Rs. 46.5 million (US $0.8 million) was awarded to 309 students, or 33 percent of the entire student body in the Faculty of Health Sciences.

The Track 1 programme was developed in 1989 to enhance the success of women from disadvantaged rural and urban areas in completing the R.N. diploma programme. These students who met the basic entrance criteria for the R.N. diploma programme received intensive course work in mathematics, English and science through the Track 1 programme. These preparatory courses of Track 1 facilitate success in the R.N. diploma programme giving students additional encouragement and basic skills to complete their R.N. diploma. Currently, 155 young women have completed this 18-week programme and have gone on to graduate from the R.N. diploma programme.

In 2001, the New Zealand Overseas Development Assistance provided AKU-SON sponsorships worth Rs. 2.9 million (US $0.05 million) for 11 nursing students from the preparatory Track I programme leading to Diploma in Nursing. The scholarships cover the full cost for the five-month preparatory period and the three-year diploma programme.

In the early 90s, the Women’s Division of the Government of Pakistan had also provided Rs. 1.5 million (US $0.03 million) over five years to AKU-SON for the students of the Track I programme.
Aga Khan University Hospital (AKUH) is a private academic medical centre committed to providing the best options for diagnosis of disease and team management of patient care, backed up by the highest doctor/patient and nurse/patient ratios in the city, as well as all support services. AKUH is the integrated health care delivery unit of AKU. Its mission is to provide exemplary care while remaining self-sustaining and accessible to all patients.

The 500-bed Hospital is equipped to handle medical, surgical, obstetric and gynaecology, paediatric and psychiatric patients.

Patients are treated by teams of professionals comprising medical consultants, residents, medical officers, nurses, senior medical students, nursing students and other health professionals. Services are available to all patients, regardless of their ability to pay.

ISO 9002 Certification

In 2000, AKUH became the first teaching hospital in Pakistan to be completely ISO 9002 certified. It now has the distinction of being one of the first teaching hospitals in the world to receive this prestigious certification.

The ISO journey began in August 1997 and culminated in April 1999, when six AKUH departments received ISO 9002 certification. A decision was then taken to have the entire Hospital certified in the year 2000. A team of five auditors from AIB-Vincotte International Limited of Belgium carried out the final two-day audit.

The auditors were impressed with AKUH’s level of compliance to the ISO 9002 Quality Management System, and announced that the Hospital would be recommended for certification, which it subsequently received in June 2000. The ISO 9002 certification further ensures compliance with the highest standards of patient care.

Multidisciplinary Clinical Teams

Rapid changes in health care delivery are reshaping the role of health care professionals. The emergence of new health care systems demand collaboration among members of the health care team, in order to achieve the
common goal of improved patient health and well-being.

A multidisciplinary team was formed in 1998, under the leadership of Dr. Mushtaq Ahmed, the Hassanali Sajan Professor and Chairman, Department of Surgery, and Khurshid Khowaja, Associate Director, Nursing Services, to enhance clinical quality in the delivery of patient care on surgical services. The team comprises surgeons, nurses, administrative representatives, an anaesthesiologist and residents of various specialities. In evaluations undertaken in 2000, it was established that, working collaboratively, the team made several notable improvements: 80-85 percent attendance at combined morning rounds by residents, nurses, physiotherapists, nutritionists; improved nutritional and physiotherapy assessment of patients; and development of a patient-family education programme. An additional achievement was the development, implementation and evaluation of 13 clinical pathways and a process of variance tracking.

**Trauma Teams**

Trauma teams are built to take advantage of a multidisciplinary approach to emergency care. The team at AKUH comprises a trauma surgeon, an emergency room consultant, general surgery and neurosurgery residents, an anaesthesia resident and a radiographer.
Trauma patients generally have multiple injuries, and multidisciplinary trauma teams ensure that simultaneous and specialised action is taken in cases where time is of the essence.

"They worked together to save my life"

Twenty-five years old Reza was rushed into the emergency room with poly-trauma (multiple injuries) following an accident between his car and an out-of-control truck.

A trauma rush call was immediately activated. The team started the complicated diagnostic procedure as it struggled to keep the patient’s heart rate and blood pressure under control.

A physical examination of his ribs revealed fractures and a massive build-up of air and blood in his chest, indicating internal bleeding. The patient started showing signs of shock and a compromised blood flow to the brain: he was pale, sweaty and sleepy.

The trauma team gave him IV fluids by inflating the pressure bags to replace blood loss. Simultaneously, a diagnostic procedure on his abdomen revealed internal bleeding as well.

The trauma team identified the patient as having multiple fractures and an injured spleen and he was moved to the operating room for surgery.

A week later, on the road to recovery, Reza specially thanked the trauma team whose timely efforts and diagnosis saved his life.

Patient Welfare Programme Assists Needy Patients

The Hospital’s tiered price structure enables patients in need to receive subsidised medical care of the same high quality as full-paying patients. In 2001, 23,505 patients received medical care to the value of Rs. 209 million (US $3.5 million) through direct remission.

This was in addition to the subsidies the Hospital provides to all general ward patients whose charges are fixed below the actual cost. One in every five patients admitted to the general ward is a welfare-assisted patient.

Since the inception of the programme in 1986, Rs. 826 million (US$13.8 million) have been spent, benefiting 170,452 needy patients. This has been greatly facilitated by the strong support provided by donors.

The financial needs of patients are determined by objective criteria, and all patients are encouraged to make some contribution to their medical costs.

Additionally, in 2001, a group of well wishers and friends started "The Patients Behbud Society for AKUH", through which zakat contributions are received and disbursed to the "mustahaqeen" (deserving).

Access to Hospital services

Analysis of patient utilisation data revealed that users of Hospital services reside in all parts of the city. In 2001, 74 percent of patients were from low to middle income areas.
“Suddenly life became my most fragile possession”

Sajid, 54, a carpenter in Gilgit, was well known in the area for his mastery of the craft.

Some time ago, he suffered severe pains in his stomach. He went to a hospital in Gilgit where the doctors, unable to diagnose his serious condition, advised him to go to AKUH in Karachi.

At AKUH, Sajid was diagnosed with cancer of the urinary bladder. Surgery was urgently needed, costing an estimated Rs. 160,000 (US $2,667). Sajid was dismayed and had second thoughts about going through with the procedure which he could not afford.

“I was disheartened, and thought surgeries for heart and cancer treatment were not for poor people like me, as the cost was beyond my pocket. But when I came to know about the Patient Welfare Department, my hopes of recovery revived.”

He met with the Patient Welfare Officer who explained the seriousness of his medical condition, assured him of all possible assistance and encouraged him to go ahead with the surgery.

During the pre-operation tests, the multidisciplinary approach of the team of doctors looking after Sajid revealed that he also had a very weak heart, which required coronary angiography. Sajid was totally demoralised and wanted to return home and allow fate to take its course.

The surgeons, however, were of the opinion that despite complications, Sajid had a very good prognosis and could hope to lead a long and productive life following both surgeries. He first underwent the coronary bypass surgery, and subsequently had his cancer removed.

The cost of the two surgeries amounted to Rs. 665,350 (US $11,089), out of which the Patient Welfare Programme contributed 68.7 percent or Rs. 457,365 (US $7,623). Both surgeries were successful and a fully recovered Sajid returned to his native Gilgit.
Aga Khan University’s Institute for Educational Development (AKU-IED) was founded in 1993 to contribute to the improvement of the quality, effectiveness, relevance and outreach of education systems in Pakistan and other developing countries. Its philosophy is based on the promotion of activity-based learning and reflective practice, contrary to the general norm in the country — rote learning. During its first eight years, AKU-IED developed a series of educational initiatives that form the basis of a coherent approach to educational improvement. AKU-IED offers Visiting Teacher Programmes (VTPs), advanced diplomas in Teaching and Management and a masters degree in Teacher Education.

AKU-IED aims to:

- Tailor its programmes to the realities and constraints of developing country contexts, using a field-based approach to professional development;
- Focus on quality improvements in classrooms and schools, mainly through teacher development, improved school management, and more appropriate pedagogy, curriculum and assessment;
- Ground its programmes in research, which is relevant to school improvement, designed to inform innovative practice and leads to practical outcomes;
- Raise awareness in teacher educators, teachers and students of the state of their physical, social, economic and cultural environment, as well as their role in contributing to its improvement.

Built at the centre of a city block in Karachi that contains five schools (ranging from pre-primary to secondary) managed by Aga Khan Education Service, Pakistan (AKES,P), the Institute is devoted to the training of school teachers and Professional Development Teachers (PDTs) who, in turn, teach others in their own districts. This “multiplier” effect has had a significant impact on school quality throughout Karachi and Pakistan. More than 50 schools in Karachi send their teachers for training to the Institute.

**AKU-IED’s Multiplier Effect**

The multiplier effect is three-fold. First, every teacher works directly with 30 or 40 students in each class, so even by the most conservative estimate, the programme has directly impacted over 40,000 students.

The second planned multiplier is that of “critical mass” – the concept of attempting to target client co-operating schools and to provide for each of them a group of graduates who together, as a critical mass within the school, will be agents of change.

The third and essential multiplier is ensuring that these teachers are supported in their endeavours by their school heads, their principals and their district education officers. This is done through two programmes aimed at administrators and school managers, the Certificate in Education Management for Administrators, and the Advanced Diploma in School Management, which target aspiring
and current heads and principals. These programmes introduce them to what is a new concept for many – that managers in education need not be only form-filling administrators but rather that they can and should be instructional leaders in a variety of ways.

**Master of Education (Teacher Education) Programme**

The two-year Master of Education (M.Ed.) programme in Teacher Education seeks to fulfill the mission of the Institute to bring about reform and improvement in education in the developing world. The programme emphasises the role of a teacher educator as a reflective practitioner and aims to prepare educators to design and implement sound decisions in order to deal with the complexities of teaching and learning in their own context. Graduates of the M.Ed. programme engage in school improvement activities in their own schools and systems.

**Visiting Teacher Programmes**

Graduates of AKU-IED’s M.Ed. programme also conduct eight-week VTPs under AKU-IED faculty’s supervision. The programme aims at enhancing the quality of classroom teaching and learning in different subject areas. It also provides the graduates with the opportunity to implement learning from M.Ed. programme. The Institute provides further intensive and specialist study for graduates of the VTPs in the form of one-year part-time, Advanced Diploma programmes in Subject Specialisation.

**School-Based Visiting Teacher Programme**

In order to increase the application, and thereby the impact, of the methods of the VTPs in the schools themselves, the Institute is moving towards a schools-based model. Under the supervision and with quality control exercised by the Institute’s faculty, the aim of the programme is to train PDTs so that they can, in turn, train teachers in their own schools.

**New Professional Development Centre in Gilgit**

After its first successful undertaking in Karachi, AKU-IED’s second Professional Development Centre (PDC) was established in Gilgit, northern Pakistan, in early 1999, in collaboration with AKES,P. It responds to the urgent need in the region for effective teachers, especially women, at primary and secondary levels.
Teachers, principals and educational managers at middle and senior levels are the focus of professional development at PDC in Gilgit, which aims to raise the educational capacity in government and private schools in northern Pakistan through its programmes including research.

Partner Universities and International Linkages

AKU-IED’s partnerships with the Universities of Toronto and Oxford continued in 2000 and 2001, with close interaction in programme planning, delivery and research. The first phase of a joint research project between faculty at AKU-IED and the Ontario Institute for Studies in Education/University of Toronto, on the teaching of English, was also completed. In the future, these partnerships are expected to include a more extensive programme of joint research, joint supervision of Ph.D. students and programme development.

Institute’s Professional Development Models Set to Be Replicated Internationally

The Institute’s models are now being replicated in other areas. The first VTP outside Pakistan was offered in Bangladesh; similar programmes were offered in Uganda, Kenya and Tanzania starting in 2000. The East Africa initiatives focus on improving the teaching of English, mathematics, science, social studies and primary education. Four additional Professional Development Centres are proposed, one each in East Africa, Pakistan (Chitral), the Kyrgyz Republic and Bangladesh.

Co-operation with Governments

AKU-IED has, in its short history, been a catalyst for change in the education sector. Its research base and its strong and credible programmes have encouraged the Government to regularly invite it to participate in and advise committees that
are planning educational initiatives at the federal as well as the provincial levels.

In response to the growing need for a formalised platform for education management, and specifically in response to requests made by the Governments of Balochistan and Sindh, the Institute has developed short courses that provide management training to education officials. These courses complement the existing teachers’ programmes for overall improvement in teaching standards. AKU-IED ensures that at least half of the participants in its regular programmes are from schools in the government sector.

Independent Evaluations Confirm High Impact

At the conclusion of its first phase of funding Rs. 720 million (US $12 million) by several international agencies, two teams of evaluators, comprising international educators appointed by the European Commission and the Canadian International Development Agency (CIDA), visited AKU-IED in 1999-2000. Both the evaluation reports of phase-I performance noted that AKU-IED had met or exceeded all targets, ahead of schedule and within budget. CIDA’s draft appraisal report concludes, “it is difficult to not be impressed with the progress that AKU-IED has made in the first phase of its existence ... AKU-IED is a success story, demonstrating an effective way to impact the education of the people in a developing country facing many challenges.”

The positive outcomes of the evaluations enabled the Institute to receive, in 2001, a further grant of Euro 10 million (US $8.9 million) from the European Commission for its second phase.

Government and private sector school heads and education officers attending a Certificate in Educational Management class in Dar-es-Salaam, Tanzania.
After three years of planning by an international task force, the Board of Trustees of AKU approved the establishment of the Institute for the Study of Muslim Civilisations (previously called the Institute of Islamic Civilisations) in London, UK, in 2000.

The Institute has a unique mission: it will strengthen research and education for the purpose of enhancing knowledge of the heritage of Muslim civilisations.

Established in 2001, one of the Institute’s initiatives will be to create an index of published works on Muslim civilisations in various languages. Its faculty will also write abstracts of these works, translate them into major scholarly languages, and distribute them globally on the Internet. This unique service will enable experts and informed publics to have easier access to key works on Muslim civilisations. At the Institute, scholars and thinkers will engage in thematic research on issues that affect contemporary societies, yet have not been given systematic attention in Muslim environments.

An educational programme on Muslim civilisations will be offered, including an interdisciplinary master’s degree, along with short courses on specialist topics.

The Institute will also develop materials and curricula for the various units of AKU, other components of AKDN, and a broad range of institutions from schools to establishments of higher education in Muslim and other societies.
University in the Community

Aga Khan University (AKU) undertakes a wide range of outreach and community-based activities that make a difference in the lives of many who might otherwise be unable to access its services. AKU is particularly committed to developing sustainable, cost-effective and affordable models of primary health care, as expressed in the mission of the Faculty of Health Sciences.

Since its establishment in 1983, AKU has focused on developing the field of health sciences. First priority was given to nursing education, followed by undergraduate medical education. As we enter the 21st century, the Faculty of Health Sciences offers a range of medical specialty education programmes, as well as advanced nursing qualifications.

The University goes beyond these traditional professions and with the steady diversification of graduate faculty includes such disciplines as demography, sociology, anthropology and economics. Candidates for more specialised higher degrees as well as continuing education are also drawn from other diverse backgrounds, such as dentistry, community development, and business management.

Simultaneously, the laboratory sciences have expanded to incorporate new strengths in molecular biology and genetics. In parallel, the teaching hospital has steadily become a regional referral centre, and in addition to serving as a base for biomedical sciences, is also becoming a placement site for health management studies.

Medical and Nursing Students Work in “Katchi Abadis”

One way in which community-based involvement is evident is through a curriculum that requires medical and nursing students to devote about 20 percent of their time in examining the challenging issues of primary health care.

This includes hands-on experience in hard-to-serve communities such as the “katchi-abadis” (squatter settlements), which represent 40 percent of Karachi’s population of 13 million. It also involves researching and helping people through the development of simple and affordable interventions such as immunisation services, potable water technologies and nutrition supplementation during pregnancy.

The students are also exposed to underlying determinants such as gender equity, literacy and income generation, which link social development with more favourable health and other social outcomes.

Hospital in the Community

Aga Khan University Hospital (AKUH) has consistently expanded the range of its outreach to provide quality health care support to the wider population of the country located too far away to access its services. This outreach has come primarily from its rapidly expanding network of Laboratory Specimen Collection Units (samples for laboratory investigations), which ensure that the standardised and quality controlled facilities of AKUH
Laboratory are accessible in areas distant from the Karachi campus.

Thirty-one Laboratory Specimen Collection Units had been set up in 17 cities across Pakistan by the end of 2001.

Another innovation that helped the Hospital reach out to distant communities was the establishment of its first Patient Referral and Information Desk in Hyderabad. The lack of tertiary health care facilities in Hyderabad and the interior of Sindh results in a large number of patient referrals to hospitals in Karachi. This service facilitates the process of patient referrals to AKUH and provides comprehensive information about the Hospital facilities to enable patients to make informed choices regarding their health care options.

In 2001, the first off-site combined Family Medicine, Laboratory and Pharmacy service was established in Malir, a lower middle income suburb of Karachi. Clinics and day surgery facilities were opened in Karimabad, in collaboration with Aga Khan Health Service, Pakistan (AKHSP). The Hospital also staffed five Family Health Programme sites set up by AKHS,P. The University Hospital and AKHS,P labs were merged in the same year. In Lahore, a Stat Lab (limited testing service for routine tests for which reports are issued on the same day) was also set up.

Based on the successful experience of AKUH Patient Referral and Information Desk in Hyderabad, Pakistan and on the encouragement of UAE Ministry of Health, the Hospital established its first international Representative Office in Dubai in 2002. The objective is to provide convenience and easy accessibility to AKUH’s high-quality, cost-effective services to patients in UAE. The office provides information about the facilities available at the Hospital as well as assists patients in obtaining feedback from AKUH consultants on their medical reports, scheduling appointments, providing cost estimates for treatment required and making transportation and lodging choices in Karachi, Pakistan.

Government Collaboration


With a membership of federal government officers, vice chancellors and other heads of educational institutions, the 18-member Task Force conducted an in-depth study of higher education in Pakistan. It followed a consultative process through seminars across the country, involving more than 400 stakeholders including teachers, students, parents and others.

The Task Force identified a list of maladies afflicting higher education in Pakistan and came up with recommendations that can bring about significant improvement in universities.

In 2001, as an outcome of the recommendations of the Task Force, General Pervez Musharraf, President of
University in the Community

Pakistan, appointed Shamsh Kassim-Lakha as Chairman of the Steering Committee on Higher Education with the status of Minister of State.

The key functions of the Committee include the development of a plan to restructure the governance and management of public universities, enhance academic quality, improve faculty compensation, and improve their operations, financial management and information systems, as well as the development of systematic linkages with other institutions including those in the private sector.

School Nutrition Programme Set to Expand

During 1992-1999, AKU’s Department of Community Health Sciences (CHS), in collaboration with the Government of Sindh and local Non-Governmental Organisations (NGOs), initiated a School Nutrition Programme (SNP). The Rs. 3,477 million (US $58 million) project was supported by the Norwegian Agency for Development Cooperation, through a grant managed by the World Bank.

The programme was implemented in 148 schools in seven low income rural districts throughout the province. Towards the end of the project, another 100 comparable schools were monitored as a basis for impact assessment. Outcomes attributable to SNP included a 39 percent increase in school enrollment, a 35 percent rise in school attendance, improved growth and development of children, development of Parent-Teacher Associations (PTA) in participating schools, and increased participation of women in local decision making. The cost was under Rs. 9 (US $0.15) per child per day.

Based on the success of SNP, the Government of Pakistan, Ministry of Women Development (MoWD), Social Welfare and Special Education, approached AKU in late 2001 with the proposal that AKU lead in the implementation of a nationwide school nutrition initiative for primary school girls, to be called “Tawana Pakistan”. The University agreed to initiate the programme in 2002 in collaboration with MoWD and the Pakistan Baitul-Mal. Once

The “Tawana Pakistan” programme will eventually reach about 500,000 girls in 5,000 government girls schools in 29 districts, and will be implemented over a period of approximately three to four years.
again, the project team is based in CHS, with evaluation support from the Department of Paediatrics. In each province, AKU will enlist NGOs as partners, guide their involvement in programme management, and help to develop their capacities for implementation, monitoring and reporting.

"Tawana Pakistan" will eventually reach about 500,000 girls in 5,000 government girls schools in 29 poverty affected districts, over a four-year period. In most respects "Tawana Pakistan" is identical to SNP, except for its focus only on girls, twice-weekly micronutrient supplementation and bi-annual deworming. Also, in each school a committee of women from the surrounding community (instead of PTAs) will be responsible for planning and managing the feeding programme. Committee members are to be volunteers, although one member identified by the committee will be paid.

Development of Women Health Professionals

Aga Khan University School of Nursing in partnership with McMaster University, Canada provided technical expertise in the five-year (1994-2000) Development of Women Health Professionals (DWHP) programme, with funding of Rs. 660 million (CAD $16.5 million) grant by the Canadian International Development Agency.

Its main goal was to assist the federal and provincial governments of Pakistan in developing their nursing systems and strengthening the role of women in the health sector, especially senior nurses and Lady Health Visitors (LHVs).

During this five-year period, 48 B.Sc. Nursing graduates and 68 LHVs completed the Primary Care Educational Programmes. In addition, eight LHVs from AKHS,P visited McMaster University for advanced leadership and management programmes.

Evidence of the impact of the programme can be measured by the fact that 80 percent of DWHP fellows are working in various leadership positions at federal and provincial levels.

They are equipped with the skills necessary to implement new ideas in nursing administration and to teach the revised standardised curricula for various nursing courses within schools and colleges of nursing. A core group of nurses in each province is facilitating the improvement of the Nursing Examination Boards.

Postgraduate Medical Education in 26 Clinical Disciplines

The Postgraduate Medical Education (PGME) and training programmes at AKU are structured to provide high quality clinical training for physicians in Pakistan and attract some of the best medical graduates in the country.

AKU offers postgraduate training in 26 clinical disciplines, including Pakistan’s first training programmes in the fields of Family Medicine and Community Medicine. A new three-year Pulmonary
University in the Community

Medicine Fellowship programme was also approved in 2000. These programmes support the development and capacity for research among residents.

At the PGME convocation in October 2001, certificates of completion of the various three to five-year programmes were awarded to 34 residents and six fellows, bringing the total number of graduates from the PGME programmes since 1990 to 311 residents and 11 fellows.

Two-thirds of these graduates are working in the country, contributing to health care as skilled generalists and specialists in cities and in remote areas such as Kunri in Sindh and Gilgit and Chitral in the northern region of Pakistan.

The experience of PGME confirms that the need for Pakistani medical graduates to go abroad for quality training is being addressed by the increasing numbers of good quality postgraduate programmes being offered in the country.

Educational Development Activities

AKU-IED was established to contribute to the effectiveness of the educational systems in Pakistan and other developing countries, primarily focusing on in-service teachers. At the heart of AKU-IED is the institution of the Professional Development Centre (PDC).

The PDC model, which adopts a clinical approach to professional development, focuses on the professional growth of teachers and integrates practice, theory and research with active links to a network of teachers and schools.

The Institute opened its first PDC in Karachi in 1993 and subsequently another in Gilgit (Northern Areas of Pakistan). With the experience and successful outcomes of these PDCs, a lead-in project was set up in East Africa in 2001 to carry out the implementation and operational plans, leading to the eventual establishment of one or more PDCs in East Africa.
Over the past two years, the University has made significant progress in research studies that address the problems and issues related to the improvement of health of the population, particularly women and children. Some very encouraging results obtained through pilot studies have led to the development of broad-based collaborative research projects supported by international agencies.

**Research Projects with Significant Impact**

- **Studies** being conducted in the Department of Paediatrics include evaluation of the nutritional status of Pakistani women of reproductive age and risk factors for foetal intrauterine growth retardation and low birth weight (LBW) infants in Pakistan.

  This initial project has yielded extremely important information on the true prevalence of LBW in community settings in rural and peri-urban Sindh. This information has formed the basis of the large intervention project on providing nutrition education and multiple micronutrient supplementation starting in 2002. This project will yield important information for future public health programmes in Pakistan.

- **Another study of significant impact** is a randomised controlled intervention study dealing with the supplementation of micronutrients to small-for-dates infants in Karachi. This is the largest randomised controlled trial of its nature in Pakistan and should yield very important data on intervention strategies for these high risk infants.

- **Birth associated mortality and morbidity** are alarmingly high in developing countries including Pakistan. Initial studies have suggested that infection is responsible, to a large extent, for this high incidence. The Department of Community Health Sciences in partnership with the University of Alabama at Birmingham has initiated a research project that will investigate the relationship between maternal infection and the presence of biochemical infection markers, as well as the relationship of various health behaviours and health status, to the presence of perinatal infection in rural and urban populations in Pakistan.

  Based on the findings of this initial two-year study, appropriate interventions to address Reproductive Tract Infections will be developed and field-tested in Pakistan over the next three-year period. It is expected that these interventions, once successfully field-tested, could be widely used to...
improve maternal and child survival in Pakistan and other developing countries. Given the critical state of maternal and child health in Pakistan, the study is extremely relevant and timely and has the potential to contribute significantly to improving reproductive health in the country.

This research project is supported through a National Institutes of Health and Fogarty International Centre grant of Rs. 96 million (US $1.6 million).

- Representing the development end of the research spectrum, the work of the Health Systems division of CHS on the design and testing of a client record card for community-based health workers is a success story. Funded by the United Nations Fund for Population Activities (UNFPA), during 1999-2001, this Rs. 10 million (US $0.2 million) project initiated a records system for use by district level community-based Lady Health Workers and village-based family planning workers. In addition to individual cards to be retained by clients, the initiative includes a district-level Management Information System, so as to enable more efficient programmatic monitoring and review. The project was developed and pilot-tested in four districts, from each province, and will contribute immensely in strengthening primary health care and reproductive health services in Pakistan, particularly in rural areas. Starting from the initial base of four pilot areas, UNFPA is now in the process of implementing this in 40 districts around the country, in collaboration with government health agencies.

Awards to AKU Researchers

The faculty at AKU has been acknowledged both nationally and internationally for the quality of its research projects. In 2001, Dr. Shaikh Arshad Saeed, the Abdulaziz Hussainali Shariff Professor, Department of Biological and Biomedical Sciences, received the most prestigious civil award, Hilal-e-Imtiaz, for his volume of cutting-edge research work in the area of Biological Sciences at AKU. Professor Rabia Hussain, the Gulamali Hijri Professor and Acting Chairperson, became the first Pakistani to receive the prestigious Third World Academy of Science (TWAS) award in Basic Medical Science for 2000.

Dr. Amin Suria, Dr. Muhammad Anwar Waqar, the Akbar Ali Habib Bandeali Professor, and Dr. Muhammad Perwaiz Iqbal, the Kurban Nagji Professor were decorated with the prestigious Sitara-e-Imtiaz in 2001. Dr. Anwar Gilani was the recipient of the Pride of Performance Award the same year.

Dr. Saeed Akhtar, a talented public health veterinarian with a doctorate in epidemiology, was honoured by the Zoological Society of Pakistan with the Professor A.R. Shakoori Gold Medal in 2000. This award recognised his original research in the field of zoonoses, the study of animal diseases communicable to humans, for which he has achieved international recognition.
Seminar and Conference Highlights

AKU places much emphasis on providing opportunities for continuing education to students, faculty, physicians, academics and members of the wider public. To that end, workshops, conferences and symposia are organised throughout the year.

Global Diabetes Management Workshop

Recognising that diabetes is one of the fastest growing diseases in the world, AKU, in collaboration with Aga Khan Health Service, Pakistan (AKHS,P) organised a two-day workshop in March 2000, on Staged Diabetes Management, which focused on the delivery and management of quality diabetes care.

Currently, with grant support from Becton, Dickinson and Company, a North American pharmaceutical firm, AKU and AKHS,P have jointly launched a comprehensive community-based diabetes care programme for urban and rural communities, using the Staged Diabetes Management model.

First Regional Nursing Conference

As part of its 20-year anniversary celebrations, AKU-SON organised an International Research Conference "Regional Collaboration in Nursing Education, Practice and Research" in May 2000. The chief guest at the event was Professor Atta-ur-Rehman, Minister for Science and Technology, Government of Pakistan, and Dr. Ada Sue Hinshaw, Professor and Dean, University of Michigan, USA and Dr. Andrea Baumann, Associate Dean, Nursing, Faculty of Health Sciences, School of Nursing, McMaster University, Canada.

Hinshaw, Professor and Dean, University of Michigan, USA and a member of the AKU’s International Advisory Committee on Research was the keynote speaker. Billed as the first research conference on nursing, it provided Pakistani nurses an opportunity to exchange ideas on the promotion, dissemination and utilisation of research at both national and international levels.
First Childhood Asthma Seminar and Workshop

Asthma is a chronic disease, triggering repeated illnesses and leading to a poor quality of life; it may even be fatal. However, it is under-diagnosed and under-treated, particularly in children who are suffering from it in increasing numbers. This is mainly due to a lack of awareness about childhood asthma amongst doctors.

The University organised a seminar in May 2000 addressing this issue, the objective of which was to increase awareness of childhood asthma amongst physicians, introduce new methods of treatment and dispel the myths and misunderstandings surrounding the disease. A workshop following the seminar, provided hands-on training on necessary skills, such as giving oxygen, nebulisation and the correct usage of inhalers for asthmatic children.

International Symposium on Cardiovascular Diseases

In September 2000, Dr. Abdul Malik Kansi, Federal Minister for Labour, Manpower and Health, Government of Pakistan, presided over the “Symposium on Cardiovascular and Pulmonary Diseases”. This theme was selected by the University for its annual research symposium, noting that occurrence of heart disease in Pakistan is currently reaching epidemic proportions. Cardiovascular disease is also the number one killer in the industrialised world. The importance of research in developing effective preventive strategies to combat this alarming trend cannot be overemphasised.

The symposium provided an excellent opportunity for national and international scientists and researchers to share their work and experiences, and create linkages to promote research in the country.

AKU-IED Policy Dialogue on School Health Promotion

The University hosted a two-day policy dialogue on the Health Action Schools (HAS) project in January 2001. The objective of the seminar was to identify appropriate content and approaches for health education in schools based on lessons learnt from the HAS pilot action research project.

This three-year research project, in partnership with Save the Children (UK), is aimed at developing health-promoting
schools in Pakistan and to influence policy on health education in the national schools.

Participants at the seminar included representatives from the federal and provincial ministries of Education and Health, including the Head of the Curriculum Bureau, international and national NGOs working with children in health and education: United Nations Children's Fund, World Health Organization, European Community and Aga Khan Development Network.

**World Bank-UNESCO Seminar**

In February 2001, vice chancellors, education specialists, principals of schools and colleges from all over the province, and diplomats attended a seminar to deliberate on the World Bank and UNESCO sponsored Task Force report "Higher Education in Developing Countries".

The speakers included the two major authors of the report, Professors Henry Rozovsky and David Bloom of Harvard University.

An important recommendation of this Task Force on Higher Education and Society was an urgent call to governments and international donors to increase their support for higher education in developing countries. A major outcome of the seminar was the establishment of the Task Force on Higher Education by the Government of Pakistan.
Seminar and Conference Highlights

Seminar on English Language Teaching

The importance of English as a language of communication was highlighted in a two-day seminar organised by AKU Centre of English Language in February 2001. Presided over by Zobaida Jalal, Minister for Education, Government of Pakistan, the seminar attracted over 400 participants, including 15 international and 40 national delegates from across Pakistan.

The objective was to highlight the need to learn English, and formulate an appropriate policy after reviewing the existing language policy and planning in Pakistan.

The seminar also aimed at bringing to light the issue of the use of information technology for language teaching in Pakistan.

National Symposium on Oncology

Recognising that cancer is a global problem and that every year increasing numbers of doctors, researchers and scientists work towards alleviating the pain and suffering of a growing number of cancer patients, AKU organised an Oncology Symposium, in September 2001, to promote the sharing of knowledge, research and experience amongst national and international experts on this dreaded disease.

Participants included world-renowned scientists from Karolinska Institute, Sweden, and Christian Medical College Hospital, Vellore, India, as well as speakers from Nepal and Bangladesh.
The generous support provided by donors, both overseas and within Pakistan, since the inception of the University, has been an important factor enabling AKU to expand its academic programmes, services and facilities to three continents: Asia, Africa and Europe.

Income from the University’s endowment covers 62 percent of the total cost of Faculty of Health Sciences. It is also an important source of funding for the high quality education imparted to medical and nursing students whose fees cover only 20 percent of the cost of their education. The endowment enables the University to adhere to its commitment to a needs-blind admission policy which assists students (33 percent of the total student body) who cannot afford the subsidised tuition fee structure.

Similarly, income from the Hospital endowment constitutes a significant portion of the patient welfare budget, which was Rs. 209 million (US $3.5 million) in 2001.

In 2001, the total of new contributions from donors to endowments, new capital projects, and annual giving exceeded Rs. 375 million (US $6.3 million). In addition to this support, the University continues to receive grants from international agencies, trusts and foundations for new academic and research programmes and initiatives. AKU gratefully acknowledges the contributions of all its donors, well-wishers and partners and looks forward to their continued support as it expands and progresses.
New Facilities

To serve the growing need for academic and health related services in Pakistan, AKUH is expanding its services by providing new state-of-the-art facilities at the University’s Health Sciences campus on Stadium Road. At the Convocation events in October 2000, His Highness the Aga Khan formally inaugurated the Ibn Ridwan Building, which houses the Community Health Sciences Department, the Juma Building for research, and the Sports and Rehabilitation Centre. His Highness also laid the foundation of the Nazerali-Walji Building for ambulatory care. This building will offer multipurpose facilities under one roof, providing greater access to medical and diagnostic services for outpatients. Clinics, diagnostics, pharmacy and radiology services, along with thirty-one consulting rooms and auxiliary facilities such as procedure and assessment rooms, teaching areas and support spaces are planned in this building. Additionally, there will be outpatient cardio-pulmonary diagnostic services, nuclear imaging and a phlebotomy station. Expected to be completed by August 2002, the estimated cost of the fully-equipped building is Rs. 288 million (US $4.8 million).

To meet the growing demand of its cardiac services, construction of the Khimji Building for Cardiac Services began in 2001 and is expected to be commissioned in early 2003. The estimated cost of the fully equipped building and modifications to the existing facilities is Rs. 366 million (US $6.1 million) of which the Khimji family funded Rs. 180 million (US $3 million). The Khimji Building will consist of three state-of-the-art operating theatres, a room for minor procedures and a Coronary Care Unit with 13 patient rooms, of which two will be isolation rooms. Other features include teaching facilities, administration and faculty offices and space for counselling of patients’ relatives. All the patient rooms and operation theatres will be provided with isolated power for safety including adequate power backup to ensure reliable power supply. A unique feature of the operation theatres is the provision for live telecasting of procedures, nationally and internationally.

Women’s Residences

Aga Khan University is an equal opportunity employer that offers women a safe and professionally rewarding work environment. As a result, it attracts women from all over Pakistan who seek professional engagement and development. The demand for hostel facilities has outpaced the accommodations available on the campus. The University therefore is building on-campus residences for out-of-station single professional women. The project started in May 2002, and its first phase of 152 rooms will include 12 studio apartments and 44 rooms with attached bathrooms. The facility will have lounges, a dining room, kitchen, pantries, laundries and an outlet for purchasing essential consumer items. The Women’s Residences are funded through the generous contribution of Rs. 120 million (US $2 million) each from three families with the balance contribution of Rs. 30 million (US $0.5 million) from the University for a total project cost of Rs. 390 million (US $6.5 million). The project is expected to be completed in November 2003.
In a difficult economic and political environment, the University achieved solid progress but at the same time exercised caution by consolidating its existing programmes while selectively directing expansion in key academic and service areas.

Compared to 2000, the aggregate of all income sources in 2001 (patient related, endowment income, tuition fees, annual giving, grants and miscellaneous sources) grew by 14 percent to Rs. 3,444 million (US $57.4 million). From this income, the University spent Rs. 3,351 million (US $55.8 million) towards supporting its operations and capital needs, which represents a 19 percent growth over the previous year.

This growth in expenditure was a combined effect of five percent cost inflation and 14 percent programme growth and structural changes. The difference of Rs. 93 million (US $1.6 million) between revenues and expenses was carried over into 2002 operations for ongoing support to capital commitments and programme expansions. Important aspects of how the expenses of FHS, AKU-IED, AKUH, the newly established AKU-ISMC, and the Faculty of Arts and Sciences are being supported as well as the challenges that lie ahead are discussed in the following paragraphs.

**Faculty of Health Sciences**

The expenditures of FHS (excluding East Africa - Advanced Nursing Studies) grew by 12 percent from 2000 to Rs. 723 million (US $12.1 million). Faculty and staff costs account for 60 percent of the expenditures of FHS. Since tuition fees can only meet a fraction of the costs of a high quality education in a developing country context, academic programmes will continue to largely depend on support from University endowment and annual giving.

Expenditure for the East Africa - Advanced Nursing Studies programme in 2001 was Rs. 69 million (US $1.2 million) and in 2000, Rs. 37 million (US $0.6 million), and was entirely funded from an Aga Khan Development Network grant.
Institute for Educational Development

After the conclusion of the initial Phase I in 2000, the year 2001 marked the start of Phase II (2001-2006) of AKU-IED activities.

The University wishes to acknowledge the significant contributions of the European Community, Canadian International Development Agency, United Nations Development Programme and Aga Khan Foundation, who provided over 90 percent of the operating costs for Phase I.

The Institute was also able to attract ancillary funding for research and expanded activities from other agencies. For example, AKU-IED was engaged in implementing initiatives to work with a selected number of Non-Governmental Organisations, and Community-Based Organisations (NGOs/CBOs) in Sindh to enhance institutional capacity building.

It is expected that this will provide equity to access and quality education to all children in general and girls in particular.

The initiative is funded by USAID to the amount of Rs. 54 million (US $0.9 million).

For Phase II of its operations, AKU-IED is pleased to acknowledge the commitment for Euro 10 million (US $8.9 million) made by the European Community.
Aga Khan University Hospital

As in previous years, the Hospital finances showed a steady growth, with revenues increasing in 2001 by 14 percent to Rs. 2,538 million (US $42.3 million). Correspondingly, operating expenses increased by 22 percent to Rs. 2,445 million (US $40.8 million). The expenditures incorporate an allocation of nine percent to the total Patient Welfare Programme of Rs. 209 million (US $3.5 million).

Endowment income and annual donations, and earnings from the volunteer-managed gift shops and greeting card campaigns provided 55 percent of welfare funding with the balance 45 percent being met from operational revenues.

The savings are used to build up reserves for future capital expansions and replacement of medical equipment, as well as to contribute to the academic programmes of the University.

To meet the demand of tertiary care services, the Hospital has expanded its "acute care" bed capacity. In 2001, intensive and semi-intensive patient bed days formed 17 percent of total hospital patient days compared to six percent in 1995.

The Hospital is now expanding its capacity to undertake more surgeries in the outpatient mode to counterbalance the constant shift towards tertiary services. This is beneficial to the patient in the form of good medical care at a much lower treatment cost. Day surgery volumes grew from 26 percent of total surgeries in 1995 to 46 percent of total surgeries in 2001.
Financial Information

Institute for the Study of Muslim Civilisations

The Institute for the Study of Muslim Civilisations (AKU-ISMC) received funding of Rs. 11.4 million (US $0.2 million) in 2001 from Aga Khan Development Network for commissioning activities, of which Rs. 6.6 million (US $0.1 million) were utilised and Rs. 4.8 million (US $0.08 million) carried over to 2002.

Faculty of Arts and Sciences

Expenditure incurred in 2001 towards the future establishment of the Faculty of Arts and Sciences (FAS) was Rs. 106 million (US $1.8 million). Of this, Rs. 102 million (US $1.7 million) was utilised for acquisition of land (400 acres) and Rs. 4 million (US $0.07 million) for the initial site development work. Currently, a Task Force, headed by Robert H. Edwards, former president of Bowdoin College, and a Trustee of AKU, is preparing a comprehensive report for planning and implementation of this facility.

Other Major Capital Projects

To meet the growing demands of the University's academic and service programmes, several major capital projects have been initiated and are in various phases of development. Total funding requirements for these projects are estimated at Rs. 1,452 million (US $24.2 million) of which Rs. 618 million (US $10.3 million) is institutional funding and the balance Rs. 834 million (US $13.9 million) is donor contribution.

It is expected that the institutional funding requirements of the ambulatory care, cardiac services and women's residences will be fully met from Hospital cash generation. The power generation project is expected to be funded completely from external borrowing and the Clifton Clinic project will be funded from internal sources Rs. 72 million (US $1.2 million) and borrowing Rs. 48 million (US $0.8 million).

Other Major Capital Projects

The table depicts major capital projects in the process of implementation, with their funding break-down and completion dates.

<table>
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<tr>
<th>S.No</th>
<th>Building</th>
<th>Donor Funding</th>
<th>Institutional Funding</th>
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<td>-</td>
<td>2.0</td>
<td>2.0</td>
<td>July 2003</td>
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<td>5</td>
<td>Self-Generation Power Plant</td>
<td>-</td>
<td>2.3</td>
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<td>6</td>
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<tr>
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<td><strong>13.9</strong></td>
<td><strong>10.3</strong></td>
<td><strong>24.2</strong></td>
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</table>

The total funding requirement for the above projects is budgeted at Rs. 1,452 million (US$24.2 million) of which donor funding is Rs. 834 million (US$13.9 million) for construction and equipment. Institutional funding of Rs. 618 million (US $10.3 million) will be met out of past reserves from hospital operations carried forward Rs. 432 million (US$7.2 million) and borrowing Rs. 186 million (US $3.1 million).
University Overview

Institute for Educational Development

<table>
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<tr>
<th>Programmes</th>
<th>Student enrolment</th>
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<td>Visiting Teacher Programmes (VTPs)</td>
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<td>252</td>
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<tr>
<td>Balochistan Educational Management Programme</td>
<td>-</td>
<td>74</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>177</strong></td>
<td><strong>2,536</strong></td>
</tr>
</tbody>
</table>

* In Pakistan, Bangladesh, Kenya, Tanzania and Uganda.

Faculty of Health Sciences

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Student enrolment</th>
<th>Total graduates including 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.B., B.S.</td>
<td>416</td>
<td>966</td>
</tr>
<tr>
<td>M.Sc. in Epidemiology and Biostatistics</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>M.Sc. in Health Policy and Management</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>Ph.D. in Health Sciences, Commenced in 1999, first graduation in 2003</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>Postgraduate Residency</td>
<td>209</td>
<td>311</td>
</tr>
<tr>
<td>General Nursing (R.N.) Diploma</td>
<td>200</td>
<td>1,305</td>
</tr>
<tr>
<td>Post-R.N., B.Sc.N.</td>
<td>59</td>
<td>265</td>
</tr>
<tr>
<td>Generic B.Sc.N, Commenced in 1997, first graduation in 2001</td>
<td>120</td>
<td>16</td>
</tr>
<tr>
<td>M.Sc.N.</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Advanced Nursing Studies East Africa</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,062</strong></td>
<td><strong>2,886</strong></td>
</tr>
</tbody>
</table>

Postgraduate Programmes

Residency Programmes

Fellowship Programmes

<table>
<thead>
<tr>
<th>Programmes</th>
<th>General Surgery and Gastrointestinal and Oncological Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Cardiology</td>
<td>Breast and General Surgery</td>
</tr>
<tr>
<td>Breast and General Surgery</td>
<td>Clinical Neuropysiology and Electrodiagnostic Medicine</td>
</tr>
<tr>
<td>Clinical Neuropysiology and Electrodiagnostic Medicine</td>
<td>Diabetes, Endocrinology and Metabolism</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>Gastroenterology</td>
</tr>
</tbody>
</table>
University Hospital

**Hospital Volumes**

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational beds</td>
<td>462</td>
<td>466</td>
<td></td>
</tr>
<tr>
<td>Patient Volumes:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admissions</td>
<td>31,524</td>
<td>32,955</td>
<td>5%</td>
</tr>
<tr>
<td>Patient days</td>
<td>129,717</td>
<td>136,036</td>
<td>5%</td>
</tr>
<tr>
<td>Outpatient visits</td>
<td>324,677</td>
<td>343,621</td>
<td>6%</td>
</tr>
<tr>
<td>Patient Welfare:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient support*</td>
<td>Rs. 117 million (US $2 million)</td>
<td>Rs. 209 million* (US $3.5 million)</td>
<td>79%</td>
</tr>
</tbody>
</table>

* Patient Welfare allocation includes Rs. 72 million (US $1.2 million) towards Afghan refugees, which was provided over three years (1999 to 2001) but recognised in the audited financial statements in 2001.

**Clinical Departments**

<table>
<thead>
<tr>
<th>Anaesthesiology</th>
<th>Paediatrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>Obstetrics and Gynaecology</td>
<td>Radiology</td>
</tr>
<tr>
<td>Pathology</td>
<td>Surgery</td>
</tr>
</tbody>
</table>

**AKU Faculty and Staff 2001**

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Staff</td>
<td>3,608</td>
</tr>
<tr>
<td>Full-Time Faculty</td>
<td>378</td>
</tr>
<tr>
<td>Part-Time Faculty and Staff</td>
<td>68</td>
</tr>
<tr>
<td>Temporary Faculty and Staff</td>
<td>50</td>
</tr>
<tr>
<td>Residents</td>
<td>209</td>
</tr>
<tr>
<td>Medical Officers</td>
<td>140</td>
</tr>
<tr>
<td>Interns</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,503</td>
</tr>
</tbody>
</table>
University Governance and Board of Trustees

Chancellor

His Highness the Aga Khan

Board of Trustees

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Former Ambassador of Pakistan to Belgium, Luxembourg and the European Communities

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Geneva, Switzerland

* In July 2001 Ambassador Saidullah Khan Dehlavi succeeded Sahabzada Yaqub-Khan who served as Chairman for 16 years.
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* Started in 2002