Universities are judged by their creativity and their impact on the society

Excerpts from the inaugural address by Prof. Dr. Atta-ur-Rahman * FRS

"The key to quality of an institution lies in the quality of its faculty members. Universities are judged by their creativity and their impact on the Society". This was stated by Prof.Atta-ur-Rahman FRS a distinguished research scientist and Chairman of Higher Education Commission of Pakistan. Inaugurating the first ever National Conference on Medical Editing held at Army Medical College Rawalpindi from April 23-25th 2007, Prof. Atta-ur-Rahman further stated that the landscape of our universities is now changing which is evident from the fact that there has been over 40% growth of ISI covered publications from Pakistan in recent years. Higher Education Commission is identifying the brightest and sending them to the best institutions in the world and then attracts them back which has reversed the brain drain.

"During the last two and a half years, HEC provided two thousand scholarships mostly for European countries and two thousand five hundred scholarships were offered for indigenous PhD programmes. At present over 70% of faculty members in our universities, do not have PhD qualifications with the result that they lack research culture. As such our major emphasis is now on faculty development. We are living in a changing world where higher education, science and technology are the great dividers. The rich

Nishan-I-Imtiaz, Hilal-I-Imtiaz, Sitara-I-Imtiaz, Tamgha-I-Imtiaz Ph.D. (Cambridge), Sc.D. (Cambridge), UNESCO Science Laureate
Chairman Higher Education Commission and Advisor to Prime Minister on Science and Technology Chairman,
Higher Education Commission,
H-9, Islamabad - Pakistan.
E-mail: chairman@hec.gov.pk

are getting richer and the poor, poorer. World is inflicted with poverty, hunger, disease, conflicts, violence and economic uncertainty".

Referring to the impact of just one institution i.e. MIT, Prof.Atta-ur-Rahman said that "MIT graduates and faculty have founded over four thousand companies which employ over one million people. The annual sale of these companies is 232 billion US dollars and collectively these companies are the 24th largest economy in the World. Socio-economic development is no longer dependent on natural resources as Knowledge has become the main driving force of world economics which is the basis of socio economic growth. Industrialization is the key to high GDP growth through innovation, production of high value added goods i.e. pharmaceuticals, Information Technology and Biotechnology".

"HEC has a vision of concentrating on Human Resource Development tapping in the pool of creativity. Our priority areas are engineering, science and technology, medical and life sciences, agriculture and education. Korea had a successful transition from Agriculture to Knowledge-Based Economy. In 1960, over 50% of their GDP was contributed by Agriculture but in Year 2000, it fell to only 5-10% whereas over 50% is contributed by Engineering, Goods and Electronics. Giving details of HEC plan of action he said that it focuses on faculty development, improving access and learning, excellence in research which is relevant to national priorities. We are trying to develop infrastructure, ensuring good governance and management besides quality assurance. The Key Areas of improvement are low enrollment in higher education, poor standard of faculty and lack of training, low quality of teaching and research and lack of relevant national needs besides poor governance of universities and there is minimal relevance of higher education to national needs which all needs to be improved. Apart from ensuring quality assurance, we are working on providing of linkages to the economy. Our strategy includes improvements in basic sciences like physics, chemistry, mathematics and biology besides applied sciences i.e. engineering, agriculture sciences, biotechnology, medical sciences, pharmaceuticals, social sciences, economics, finance management, innovation and entrepreneurship".

"Higher Education Commission has laid down eligibility criteria for faculty appointments, introduced Tenure Track System, laid down criteria for recognition of journals, criteria for college affiliation, quality criteria for PhD programme, introduced international refereeing of Dissertation and international publications. University laboratories have been improved. There

has been manifold increase in funding for research. During the Year 2006-2007 HEC approved grants for 319 research scientists to attend conferences while seventy three grants were approved to host conferences. We have guaranteed jobs to fresh PhDs with higher salary structures under tenure track system. We have approved 75% reduction of Income Tax for all academics. Under Foreign Faculty Hiring Programme, two hundred seventy ex-patriot and other scientists have been attracted to return to Pakistan and serve here".

"Higher Education Commission has provided over three hundred million rupees for National Research Programme for Universities. We have also initiated revision of curriculum and now third revision is in progress. We have also provided Video lecturing facility. Our Digital Library has twenty two thousand full text journals available nationwide free of charge and this facility has been made available to two hundred fifty institutions so far. For International Video-lecturing programme, high quality video conferencing equipment is being installed and a series of international lectures have been planned. Core groups in different disciplines have been formed. After these initiatives by the Higher Education Commission, now brightest young men and women have started opting for careers in Science and Technology subjects as their first choice. Research publications output of Pakistan has also increased tremendously as compared to 2001. As regards development funding, during the Year 2007, we have earmarked a budget of 14.3 billion rupees for 354 development projects. HEC has a total budget of 14.48 billion rupees in 2007. We are funding ninety nine institutions. Almost 650 million rupees have been earmarked for promotion of research. Prof.Atta-ur-Rahman dispelled the impression created by a few that our universities are being provided too much funding saying that the annual average grant was about US\$ 7.5 million which is less than 1% of the budget of this year of any top class university in Asia. For example National University of Singapore has an annual budget of US\$800 million. The budget of our universities, Prof.Atta-ur-Rahman opined needs to be increased at least fifty fold instead of being reduced. He was of the view that we need to spend at least 6% of our GDP on education sector and the financial allocation for Higher Education as per international norms should be at least 25-30% of total education budget which was currently just 17%".

"Some of the universities in Pakistan, Prof.Atta-ur-Rahman stated are still in a mess that we in HEC has inherited. However, the situation is changing rapidly for the better and a silent revolution is taking place. The real change will be visible by the Year 2008/2009 when hundreds of PhD level faculty

will start returning each year. We have launched an unprecedented number of systemic reforms which have benefited the universities". He reiterated that "the key to success is an outstanding faculty. To attract that HEC has introduced Tenure Track System, offered higher grades, research productivity allowance, Income Tax concession, PhD allowance, research grants and faculty development programmes. We have also undertaken establishment of new Engineering, Science and Technology Universities with the collaboration of friendly foreign countries. At present over hundred billion rupees goes out every year when Pakistani students go for studies overseas but after the establishment of these universities in Pakistan, the foreign students from the world would come to Pakistan for studies" Prof. Atta-ur-Rahman remarked.