A Revolution in Higher Education: The Pakistan Example

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In this fast changing world, the key to progress lies in the abilities of nations to unleash the creative potential of their youth in order to develop strong knowledge economies. It is the nature, quality and efficiency of the interactions between the three major players, universities, industries and government that determine how a knowledge economy evolves. The developing countries can progress only if they transition to knowledge based economies by establishing world class centers of excellence and focusing on dynamic policies on science, technology, innovation and entrepreneurship that create job opportunities for the young in high value added sectors. We can achieve much by sharing our strengths in various fields.

Pakistan has experienced tremendous progress in the higher education sector in the last decade. This is illustrated by an increase in university enrolment from 276.000 in the year 2002 to over 1 million by 2012, increase in the number of universities/degree awarding institutions from 71 in 2003 to 146 by 2011, increase in Ph.D. output from 3,281 during the 55 year period 1947-2002 to about 5000 during the subsequent 9 year period 2003-2012, and increase in international research publications from only about 600 annually in the year 2,000 to about 8,000 research publications annually by the year 2012. This was accompanied by a massive foreign scholarship program for Ph.D. level training, placement of an educational satellite in space and a ten-fold increase in faculty salaries on a new contractual system of tenure-track appointments, provision of digital library that provides every student in every public sector university with 25,000 international journals and 60,000 text books. The research publications output in internationally abstracted journals from Pakistan is now about the same as of India on a per million population basis, illustrating the spectacular progress made during the last decade. Recently an Integrated Massive Open Online Courses (i-MOOCs) program has been initiated to offer free educational courses from Stanford, MIT, Harvard and Khan Academy to schools, colleges and universities in Pakistan and across the world through television and internet.

The remarkable programmes in Pakistan initiated under my supervision have been termed as a model for other developing countries to follow by the Royal Society (London) in a book entitled "A New Golden Age?" and a number of international awards have been given in recognition of the revolutionary transformation of the landscape of higher education. A review of the Higher Education system of Pakistan was carried out by Prof. Michael Rode, Chairman of the United Nations Commission on Science, Technology and Development. He wrote and I quote:

"Around the world when we discuss the status of higher education in different countries, there is unanimity of opinion that the developing country that has made the most rapid progress internationally in recent years is Pakistan. In no other country has the higher education sector seen such spectacular positive developments as that in Pakistan Some of these developments will be presented.

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Presenter

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