

**Eighth All Pakistan Software
Competition and Exhibition**

“PAKISTAN: THE NEXT SILICON VALLEY?”

Chairman’s Address

by

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It is a great pleasure for me to chair this opening session of the 8th All Pakistan Software Exhibition and Competition organized by the A.Q. Khan Research Laboratories.

We always associate the name of A.Q. Khan with bold and farsighted initiatives. This is certainly one of those timely initiatives which was first launched in 1990. By now, it has become an annual national event which the computer science community awaits with great anticipation and excitement. The competition itself has improved each year not only in terms of the number of participants but also in terms of the quality and innovative application of computer software.

I firmly believe that we are entering a new computer age in the 21st century when our children and grandchildren will grow up playing with computers and when the idea of an information superhighway would have been converted from a vision into a reality.

Unfortunately, we in Pakistan still lag way behind the requirements of this new computer age, though some steps are being taken now to bridge the gap. I made some modest contribution to the promotion of computers in Pakistan by completely abolishing the high custom duty on the import of computers in 1985 and by introducing a special computer allowance for governments servants. I am glad that computers are now increasingly being used in offices and homes. The PC is still not as commonly in use as

perhaps the cellular phone but I am sure that this situation will change quite dramatically in a few years.

Pakistan's future depends on the conquest of new technologies. If we invest in the basic education of our people and impart technical skills to them, and if we open up our economy, we can go forward confidently and take over global markets in computer software, electronics, informatics and many new technological fields. By combining our low wages with high labour productivity, we can convert our poverty into an asset and leapfrog several decades of development.

This is essentially the development strategy that was followed by Japan in the 1930s and 1940s; by the East Asian industrializing tigers of South Korea, Hong Kong and Singapore in the 1950s and 1960s; by the new industrial tigers of Malaysia, Thailand and Indonesia in the 1970s and 1980s; and by that emerging industrial giant, China, in the 1980s and 1990s. Each time the winning combination was the same: spread basic education to all, provide technical training and skills on a vast scale, have the self-confidence to conquer new technologies, open your economy to the global markets and compete furiously.

I believe that the economic frontier is slowly shifting from East Asia to South Asia, as wages are going up at a rapid pace in East Asia and China. We should position ourselves to take advantage of this opening opportunity in the 21st century. Unfortunately, however, South Asia is investing very little in the education and health of its people. As

we analyzed in our recent Report on *Human Development in South Asia*, our region has emerged by now as the most illiterate, the most malnourished, the poorest and the least gender-sensitive region in the world. And while South Asia has fallen behind all other regions in the world, including Sub-Saharan Africa, it appears that Pakistan is falling behind all other countries of the South Asia region, including India and Bangladesh, in its education, health and technical training indicators.

These are our ground realities. But this is not a picture of despair. In fact, it should shame us and stimulate us to make a new resolution to turn things around. After all, East Asian industrial tigers started side by side with us in the 1960s and are now 27 times ahead of us in their economic wealth. We can do the same. But it will take a tremendous investment in education and technical skills. Let us face the sobering truth: no illiterate, feudal society has ever become an industrial tiger of any colour or form.

It is in this context that I wish to emphasize the crucial importance of training in computer science and emergence of computer software as a key industry in Pakistan. Again, I firmly believe that we have all the talent to enter a new computer age. We must create a conducive environment for the full flowering of this talent.

I am proud to mention that I am currently chairing a private foundation, the Foundation for Advancement of Science and Technology (or FAST), which is running three computer science institutes in Karachi, Lahore and Islamabad, which have a total number of around 800 students this year completing their B.Sc. and M.Sc. in computer

science. I am glad that these students are admitted purely on merit, they get the best training in computer science, and they are immediately absorbed at attractive salaries by a fast growing market in Pakistan for computer science skills. The annual output of graduates from FAST institutes is about 100 at present though this is likely to go up sharply in coming years as our annual intake has increased to 350 students a year. You will be pleased to know that the FAST is already producing over one-half of the computer science graduates who emerge every year.

But our national needs are much greater than the limited number of computer scientists we are producing in Pakistan today. That is why we intend to double or even triple the enrolment in FAST institutes in the coming years so that we start producing at least 1,000 computer science graduates a year. We are in the process of obtaining a Charter for the first Computer Science University in Pakistan which was approved by the Pakistan Cabinet in December 1996. I believe that the establishment of such a University will go a long way in producing an adequate number of high-quality computer scientists in the country and in encouraging the production and export of computer software.

I am glad that the present government is extremely serious about the promotion of computer software and has formulated a very enlightened policy framework for this purpose. I personally believe that we can successfully compete with India's silicon valley in Bangalore, and even surpass it, if we make a firm national commitment to forge ahead in this field. This is a competition we should enter, with new vigour and new resolve. I am sure that we can do well in this competition. We started behind India at the time of our

independence in our per capita income: we are now 75 per cent ahead. We started behind in cricket: now we have won two-thirds of the cricket matches against India. We started behind in nuclear technology: now, thanks to the efforts of A.Q. Khan, we can claim equality. Let us now enter into a friendly competition in computer software. This is a race we cannot afford to lose.

Let me conclude by congratulating A.Q. Khan once again for organizing this annual event for Software Competition and Exhibition. Let us hope that such events will stimulate our national quest for excellence in this emerging field. And let us hope that our younger generation, of which we are so proud, will take us into the new computer age of the 21st century, with our heads held high and our national goals clearly defined and skillfully implemented. Let us convert Pakistan into the next silicon valley.