

## NADEEM UL HAQUE

VC, PIDE

The internet has become part of everyone's life all over the world, including Pakistan. While most of Pakistan has weak connectivity, our priority in our public investment remains building roads and brick and mortar. All this while people have limited access to devices to use the internet well.

During the pandemic, PIDE as well as other academic institutions have experienced extreme difficulty in teaching on the net due to the poor connectivity in most areas of Pakistan.

PIDE engaged in a four-month exercise on this subject, talking to CEOs of telcos, users, Silicon Valley Pakistani renowned experts as well as ecommerce developers to understand how Pakistan can get to internet connectivity for all.

PIDE has now concluded that access to the internet should be treated as a right. Our economic future

depends on the availability of fast internet to all. Every possibility in the future is going to depend on the net. Pakistan has not taken advantage of the opportunities of globalization and the computer age. We should now make ourselves ready for the connected age. And we must do it on an emergency footing.

How can we get internet for all? Do we have the resources? Should the government fund it?

PIDE has learnt that we can easily and quickly get internet for all if the government gets certain aspects of the regulation right. And no, there is no need for the government to spend large amounts of money. What then is needed?

To start with, the government should allocate more spectrums for internet usage. The spectrum exists and must be used, or it disappears. The government likes to allocate a small part, keeping back large parts

## - for what?

Spectrum bandwidths are auctioned to maximize revenue. Since the price is unknown and there is a suspicion of underselling, officials fix a reserve price that is too high. Often auctions are cancelled. If investors spend a lot of money on buying spectrum, they have little to spend on development. This slows down internet development and also makes the service very expensive.

Revenues can also be collected over time rather than all at once in an auction through giving the spectrum for a share of revenues over time. That would allow for faster internet development. Our students, commerce and people will be happier.

Fiber optic network is the major carrier of digital content. Barriers to the laying down of this fiber optic cable should be removed. Once again, revenue raising through taxing the laying down of cable must be stopped. All networks of cabling or piping such as for electricity and other infrastructure should include facilities for adding fiber optic.

The last mile will be 5G and we should start preparing for it. The regulatory and permission framework should be fast tracked – now. Companies should start investing in it – now.

Internet is provided through a network of fiber optic cable with towers at nodes to send out the signal. The towers and pipeline could be owned by different companies and the providers can rent their use. The government regulatory framework must allow for it. Our focus must shift to digital content provision and away from mere telephony.

Finally, there is no use providing connectivity when devices are taxed heavily. For education, telemedicine, content development and many other creative entrepreneurial activities, a good computer and a tablet and a mobile phone is a necessity. Let us not stop our people'a development merely for the collection of revenue or for facilitating the assembly of yesterday's technology.

PIDE suggests the internet is now a human right and must be a top priority of the government.



(04