## **Institute for Policy Reforms**

Press Release, 15 July 2019

## **Develop IT for Knowledge Based Economy in Pakistan**

Development information and communication is critical for Pakistan to remain relevant in the Information Age and to build a knowledge based economy. This was stated in a Brief issued today by the Institute for Policy Reforms (IPR). Written by Hassan Nabi Dar, the Brief highlights how the advent of Information Technology (IT) and Information Communication Technology (ICT) have revolutionized societies and economies, redefining how we live. It states that if Pakistan is unable to keep up with technology, it will simply be left behind, whereas nations who manage to learn and adapt to technology will leap ahead. Therefore, the transition from a traditional based economy to a knowledge based economy will depend on the level of education, information, research, and technology available in the country, as these factors are crucial to initiate structural change. Additionally, both physical and human capital are interlinked to ensure economic development. Without any mental effort, innovations cannot be produced.

The Brief provides a comprehensive overview of the challenges faced by Pakistan in the domains of IT, ICT, and the development of a knowledge based economy. Among the foremost challenges are the lack of proper ICT infrastructure, the need for upgrading higher education and research facilities, and the digital and knowledge divide within Pakistan. The brief also points out to the dire need for a coherent national policy, that aims to integrate science, technology, and innovation into all sectors of the economy. Pakistan must declare a national education emergency with at least 5% of GDP allocated for education. The government must also must modernize educational standards and make IT and ICT courses compulsory for educational institutions. There is also an urgent need for high quality research institutions which can help in upgrading our various industries. In addition, Pakistan requires knowledge transfer from abroad and the Brief recommends that knowledge transfer be linked with foreign direct investment, so as to make Pakistan self-sufficient.

The government of Pakistan must develop IT and ICT infrastructure not only in the major cities, but throughout the country. Such an equitable distribution will help prevent a digital and knowledge divide in the country. In addition, various fiscal incentives to the IT industry, promotion of startups and incubation centers through financial support have been recommended.

The human race has never witnessed changes on such a scale in its history as it is facing today. Paradoxically, it is both the best and worst of times because the arrival of such technology has had unintended consequences, with enormous benefits, yet with risks. IT and ICT have stimulated globalization, instant communication, vast scale sharing of information and data, exchange of ideas, and access to free education through e-learning. IT also provides cost effective measures for businesses and the creation of new jobs. However, at the same time, the arrival of such technology has brought forward new problems. Problems such as issues of privacy, hacking, misinformation, psychological warfare, espionage, and cyberwarfare. To tackle these issues, governments of the 21st century, especially in Pakistan, must fully embrace technology so that they don't become vulnerable to the threats posed in the Information Age.