

In the Name of God, the Most Merciful, the Most Kind



January 27, 2016

## The Worth of Scientific Approach

History is the witness that the societies that have pursued the habit of searching for knowledge have achieved success and development and that is the reason that they stand distinct from others. In fact, all the human beings would not have been successful in coming out of the caves and living in modern societies and states, and would still be worshipping the deities of rain, storm, fire and many others, had not they held the hands of true reason and discovery.

It is now an open secret that the inquisitiveness, research and investigation have the power of digging out the reality from the depths of the unknown. As a matter of fact, in the modern scientific world, research and investigation have supported human beings in piling stocks of reliable knowledge and information regarding every field of life. Now, the social, economic, technological, educational and cultural problems are no more threatening human beings the way they used to do as now they have the weapon of research and investigation.

The knowledge and information gained through scientific research and investigation can easily go through the test of reliability as they are gained through a thorough and formal process. They are not just based on the instincts, guesses, blind beliefs, superstitions and legends; they are basically the outcome of different steps that include making observation, building hypothesis, performing experiment and then the deriving the result. Therefore, the margin of error is very less in them – much lesser than the beliefs, guesses and myths. Today's developed nations, in fact, have understood the true worth of scientific research and investigation; therefore, they have adopted them in their education system. Their schools, colleges and universities are equipped with modern techniques of research. The student are, thus, required to follow those techniques and make their education as much practical as possible. They are not into systems where the students have to cram their lessons and subjects and they do not get any idea about what they are basically reading. Such systems are basically adopted by the countries that do not realize the worth of scientific research and investigation. And, it is also one of the reasons that such societies are backward and underdeveloped.

Our country Afghanistan is also one of the same. Our education system is not fully developed and the system that we have is not at all based on scientific approach. Our teachers do not completely comprehend what they teach and how they teach. They mostly compel the students to learn whatever is there in their text books. They even apply force and violence to do so. While the students who use their memories alone and can cram their subjects are the best students and they are the ones who get positions and afterwards lucrative jobs, but they are not able to have true awareness.

We also have madressahs, which are also based on the similar type of approach or even worse. The students are not taught different subjects and their education is totally based on single approach. They are, in the end, turned into blind believers who are ready to do anything for their beliefs which may not be based on truth or true teachings of religion.

We, both in our individual and collective lives, need to adopt the approach that is nearer to the truth if not completely based on truth. Doing so will not only support us in our educational life but will also assist us in fighting so many social evils. If we adopt scientific approach towards our social problems they will be easier to handle. Unfortunately, we have been considering them as the curse of God, instead of realizing that they are the outcome of our own irresponsibility and negligence. We fail to understand the social processes and their dynamics and therefore fail to understand different issues and also fail to suggest solutions for them.

In today's world of modernization when the other societies have done miracles through their knowledge we need to realize that the true knowledge is the one that makes us better and wiser human beings. It is not about getting positions and winning competitions but doing better as a social being. It must be completed through our transformation into higher beings. It must depict our reasoning and understanding capacities and must not turn us into parrots that can only repeat what they hear.

We, therefore, need to pattern our institutions, particularly the education institutions, on the basis of scientific approach and method; help our students and our people see their surroundings and the world with open eyes and open minds and thus understand the reason of their being and make efforts to improve themselves and their surroundings. It is what humanity demands from them as they are considered as the best of the living beings because of their capacity to think, reason and discover.

# Afghanistan, Pakistan and Terrorism

By Dilawar Sharzai

Last week, Pakistan pledged further action to combat militants, but Prime Minister Nawaz Sharif admitted progress had often been slow, speaking just days after a deadly attack by heavily armed gunmen on a university campus killed 21 people. Sharif said that Pakistan and Afghanistan had an agreement that both countries would not allow militants to use their territory to launch attacks on their neighbour. "Pakistan and Afghanistan are strictly following this agreement, but there are certain elements in Afghanistan who on their own are attacking Pakistan," Sharif said. If such statements are really turned into actions, they can be really helpful for the peace and tranquility in the region. Both Afghanistan and Pakistan can play a vital role in the ongoing crucial phase of War against Terrorism and their mutual cooperation and understanding can further strengthen their role but there have been many fluctuations in their relations that have influenced the endeavors against terrorism.

In post 9/11 scenario Afghanistan and Pakistan became the ground for War against Terrorism. The US troops landed in Afghanistan to revenge the dreadful attacks of 9/11. Pakistani government decided to join hands with the US government in this war, and started uprooting the fundamentalist elements from its lands. But by then the evil had penetrated to a large extent in different parts of the country. Once they felt their existence in jeopardy they started reacting and a wave of terrorism started in Pakistan that affected the Pakistani society to a large extent. Suicide bombing, target killing and bloody assaults on innocent civilians, religious and ethnic minorities, religious places, security checkpoints and many other important people and places became the order of the day and they still threaten Pakistani society to a terrifying degree. The extent of the penetration of the religious extremism in Pakistani society has become evident. It is no wonder as once Pakistani government (government of Gen. Zia ul Haq) itself took active part in supporting Taliban in Afghanistan. Pak-Afghan border at that time used to be a training ground for Taliban. All those arrangements were sponsored by America, who basically wanted to counter Soviet invasion of Afghanistan. Though at the end Soviet troops had to retreat, Taliban along with their extremist religious ideas kept on gaining strength and consequently became the most dominating force in Afghanistan. Meanwhile, the growing networks of religious fanatics kept on increasing in the areas of Pakistan bordering Afghanistan with no strict accountability.

Taliban reign in Afghanistan, though could put an end to the civil war, was marked with strict and extremist religious principles. Their rule was determined to make Afghan society follow the hard-line principles which they thought were pure and sacred. In the process they not only kept Afghan society away from the modernization process prevalent in the world but also committed severe injustices to human beings. Human rights were pressed under the burden of the heavy and self-designed religious principles and Afghan society started resembling a society in Dark Age. As power and weapons were the guard-

ian of the justice system, Kalashnikov culture was further inculcated in the society. People instead of finding the solution of their problems in any justice system or political platforms started forming militant groups for safeguarding their rights. This further intensified the roots of militancy in the region. These networks of religious extremists and militants kept strong ties with the networks in the bordering regions of Pakistan and have always used the Pak-Afghan border as a part of their defense strategy.

Since the invasion of the international troops that resulted in the downfall of Taliban there have been much improvements made, but the roots of religious extremism and militancy still remain fresh in many parts of the country that have been threatening the security arrangements in the country to a large extent. Now more than 14 years have passed since the appearance of international troops in the region and remarkable contribution has been made from international community in the form of aids and assistance, Afghan government and security forces are still fighting Taliban and like-minded groups. At this critical juncture the future security arrangements still remain doubtful as the country has still to face angry Taliban. Though there are efforts to reconcile with them for future developments, the outcomes still remain meager.

Pakistan at this critical juncture can really play an important role, as the Taliban networks are spread over both sides of the border. There have been Taliban who crossed the border when the life for them became difficult in Afghanistan during the fight with international troops. There are some factions of Taliban who operate from the Northwestern parts of Pakistan and target American and Afghan forces. Haqqani network in this regard can be named as a clear example. Further there are factions of Taliban who are harshly against the Pakistani government and carry out their operations in different parts of Pakistan and they have their roots in Afghanistan. Therefore, the issue of Talibanization is not common to any of these two bordering countries alone. They both suffer from the phenomenon. Moreover, both the countries are influenced by the policies of the government directed towards the terrorist networks.

Both Afghanistan and Pakistan have to take serious measures to curb the issue of terrorism and both have to join hand and take concrete measures in this regard. There have been promises between both the countries earlier as well but these sorts of promises can never help them in putting an end to this evil. The current assurance of Pakistani prime minister is really appreciating but it would not suffice unless it is converted to practical measures. If Pakistan considers peace in Afghanistan necessary for peace in the region it must make its co-operation sure for peace process in the region. Yes, there are certain concerns for Pakistan at the moment, but the extinction of terrorists from the region can support the national interests of Pakistan as well. That is what Pakistani authorities have to keep in mind at this critical juncture.

Dilawar Sherzai is the permanent writer of the Daily Outlook Afghanistan. He can be reached at email.urya@gmail.com

## Mastering the Fourth Industrial Revolution

By Larry Hatheway

Technological innovation has long triggered diametrically opposed reactions: awe of new possibilities for some; for others, fear of disruptive change. But most of us don't even realize what is happening. We take change for granted.

Human ingenuity is far too little recognized or appreciated, particularly in financial markets. Investors obsess about more pedestrian concerns: fears about a hard landing in China, the repercussions of falling oil prices, and the risk that some shock could tip a fragile world economy into renewed recession or deflation.

Obviously, worries about global demand conditions are not unfounded – surely the last thing the world economy needs now is renewed stress. Yet, for all our angst about excessive debt and policy inadequacy, nothing is as important as human ingenuity for delivering improved living standards and investment opportunities. Indeed, the advent of new technologies holds out the promise of a Fourth Industrial Revolution, the theme of this year's World Economic Forum meeting in Davos.

The First Industrial Revolution was based on the steam engine. James Watt's invention, introduced around 1775, powered the nineteenth-century expansion of industry from its origins in England to Europe and the United States. The Second Industrial Revolution, from the last third of the nineteenth century to the outbreak of World War I, was powered by developments in electricity, transportation, chemicals, steel, and (especially) mass production and consumption. Industrialization spread even further – to Japan after the Meiji Restoration and deep into Russia, which was booming at the outset of World War I. The Third Industrial Revolution arrived at the end of the last century with the manufacture and diffusion of information technology.

The promise of a Fourth Industrial Revolution consists in advances in robotics, the Internet of Things, big data, mobile telephony, and 3D printing. According to one estimate, the successful adoption of these new technologies could boost global productivity by as much as the personal computer and the Internet did during the late 1990s. For investors, the fourth revolution offers opportunities for vast profits, akin to those delivered by its predecessors. Already, early movers in fourth-generation technologies command eye-popping valuations. New eras of rising investment, productivity, and living standards are not just possible; they are probable, recurring with increasing frequency. And they are the result of human ingenuity. But new eras require more than basic science or garage-based entrepreneurial wizardry. To be transformative, technology must be adopted and diffused into everyday life.

This is easier said than done. At the very outset of industrialization, Watt struggled financially and did not successfully commercialize his

steam engine until he formed a partnership with the English manufacturer Matthew Boulton.

More important, history suggests that enthusiasm – in macro and market terms – can run ahead of reality. One does not have to be a "productivity pessimist" (arguing, for example, that the indoor toilet was the last great human invention) to acknowledge that many new technologies deliver less than promised or reward investors only with long lags.

It is worth remembering that early steam power predated Boulton and Watt by nearly a century, and that it took more than a half-century for their invention to overtake conventional water-mill power as the mainstay of nineteenth-century industrial production. Volta first discovered electricity cells in 1800, but it took another eight decades to introduce direct current as a means of power transmission.

Likewise, ENIAC, the first electronic computer, was developed in secret during World War II. Computing power and usage grew exponentially over the ensuing decades of the twentieth century; but even as late as the 1980s, the Nobel laureate economist Robert Solow could quip that the computer age was "everywhere but in the productivity statistics."

For investors, this consideration holds important implications – among them, the need to be patient and to resist the temptation to overpay early. Initially, identifying losers (who remembers Wang Computers?) may be as important as picking winners.

It is also important to understand how technology can transform seemingly unrelated industries. The advent of computing power enabled "big box" retailers in the US – Walmart, Staples, Home Depot, and others – to supplant both mom-and-pop stores and the established retail chains of the 1950s and 1960s. Computational power, together with advances in the logistics of transportation, storage, and delivery, enabled retailing on hitherto unimaginable economies of scale.

Yet today, these same big-box giants are under siege from online retailing, which promises even greater economies of scale and logistical efficiencies, undercutting even the most efficient brick-and-mortar operations.

Ingenuity it is. But, to paraphrase Joseph Schumpeter, it is also destructive. In today's parlance, we speak of "disruptive technologies." But no-one should be lulled by jargon: New ways of producing things often kill off old industries and jobs before the full benefits of the successor mode of production are realized. A certain degree of violence inevitably accompanies human progress. That is why the executives gathering in Davos this month are discussing how to "master" the Fourth Industrial Revolution. For all the awe-inspiring promises of technological advance, theirs is an apt concern.

Larry Hatheway is Chief Economist at GAM Holding.



Chairman / Editor-in-Chief: Dr. Hussain Yasa

Vice-Chairman: Kazim Ali Gulzari

Email: outlookafghanistan@gmail.com

Phone: 0093 (799) 005019/777-005019

www.outlookafghanistan.net



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