Knowledge Economy from the Pakistani Perspective

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Introduction

Business Dictionary (2010) defines knowledge economy as:

“Economy based on creating, evaluating, and trading knowledge. In a knowledge economy, labour costs become progressively less important and traditional economic concepts such as scarcity resources and economics of scale cease to apply”.

World Bank (2008) document states regarding knowledge economy,

“For countries in the vanguard of the world economy, the balance between knowledge and resources has shifted so far towards the former that knowledge has become perhaps the most important factor determining the standard of living – more than land, than tools, than labour. Today’s most technically advanced economies are truly knowledge based.”

World Bank highlighted the four pillars for knowledge economy are

1. Economic and Institution management
2. Education and Skill
3. Information and Communication Infrastructure
4. Innovative System i.e. Research

The knowledge economy focused on the production and management of knowledge in the frame of economic constraints, or to a knowledge-based economy. In another meaning, it refers to the use of knowledge technologies to produce economic benefits. The essential difference is that in a knowledge economy, knowledge is a product, in knowledge-based economy, knowledge is a tool. In this way, brain attains a status of resource, ideas and thoughts are considered the products and the money so earned – knowledge money or economy (Wikipedia, 2010).
Drucker (1969) opines that unlike most resources that reduce when used, information and knowledge can be shared, and actually grow through application. Human capital — competencies — are a key component of value in a knowledge-based company. Communication is increasingly being seen as fundamental to knowledge flows. Social structures, cultural context and other factors influencing social relations are therefore of fundamental importance to knowledge economies. (p.263)

Developing countries differ from developed countries not only because they have less wealth and capital but because they have less knowledge. It is often costly to create and that is why much of it is created in industrial countries. United States dominates the world’s knowledge economy because 45 out of 50 regions with best knowledge base in the world are situated in the America. (Omar, 2003)

Aims and Objectives

The aim of this paper is to define knowledge economy, its historical background with Islamic perspective and discuss the position of Pakistan in this regard. The issue of education, Information communication technologies (ICTs), libraries, book publishing, brain drain and good governance have been discussed. Valuable recommendations are made in the end of paper for improvement of existing situation.

Islam and Knowledge Economy

Islam promotes learning and encourage to gain more and more knowledge even based upon knowledge. The text of the Quran is replete with verses inviting man to use his intellect, to ponder, to think and to know, for the goal of human life is to discover the Truth.

“He has taught you that which [heretofore] you knew not.” (Quran 2:239)

Prophet Muhammad (peace be upon him), said

“Did not leave behind money, but (rather) knowledge, whosoever acquires it benefits a great deal.” & “O Allah! I seek Your refuge from such a knowledge which is not beneficial.”

The Hadith literature is full of references to the importance of knowledge. Such sayings of the Prophet as "Seek knowledge even in China", "Seek knowledge from the cradle to the grave", and "Verily the men of knowledge are the inheritors of the prophets", have echoed throughout the history and literature of Islam. Over seven hundred verses of Holy Quran urge to develop critical thinking and invite man to contemplate (Baqi, 2000). There are blessing for people who are endowed with knowledge, wisdom and understanding. Allah says;

“It is only such people who are placed in higher grades in the presence of their Lord, and are blessed with special favours.” (The Qur’an : 58 :11).

Elaborating this verse, Abdullah Yusuf (1957), in his commentary adds

“Although faith makes all people equal in the Kingdom of Allah, but there is leadership, rank degree, joined with greater and less responsibility, and that depends on true knowledge and insight”.

Quran strongly recommends the acquisition of knowledge even during the war.

Nor should the believers, all go forth together; if a contingent from every expedition remained behind, they could devote themselves to studies in religion (The Qur’an : 9 : 122).
Impact of Islam on the West

It is a historical fact that without Islamic contributions towards the course of intellectual enlightenment the great western movements of the eighteenth and nineteenth centuries would not have been possible. The Renaissance, the Protestant Reformation, the age of Enlightenment and the Romantic Movement would not have realized their full implications if they had not derived their basic ideas from the Islamic thought and the great works of Muslim thinkers and writers (Hussain, 2007).

The Muslim world was at its peak from the 8th century (750) to the earliest period of the 12th century. This was an advanced civilization had all the ingredients of knowledge economy, which Robert Briffault (1938) describes as;

"brilliant and energetic civilization full of creative energy".

As against this the West was “sunk in barbarism” and low degradation. Robert Briffault (1938) recognizing the impact of Islamic civilization on Europe says:

“It was under the influence of the Arabian and Moorish revival of culture and not in the fifteenth centure that the real Renaissance took place. What we call science arose in Europe as a result of new spirit of inquiry, of new methods of investigation, experimentation, observation and measurement, of the development of mathematics which unknown to Greeks. Those methods were introduced into the European world by the Arabs”.

The greatest contribution of Muslims in Spain was in the field of science and philosophy. Sir Thomas Arnold (1931) in “The Legacy of Islam” says

“They (Muslim) rein to philosophical speculation and encourged the philosophers, scientist and writers in their work of research, theology and teaching”.

Muslims played a significant role in transmitting the Greek works to the West.

Education and Muslim Ummah

The lack of education is the main malaise of Muslim Ummah. It is root cause of all deficiencies that are found among the Muslims. America has about 300 million population out of which 1.1 million qualify as ‘scientist’, while out of 1.5 billion Muslims only 300,000 qualify as scientists. The ratio would be 230 scientists per one million Muslim. In American there are more than 5,760 universities, while in the Muslim world with a population of 1.5 billion there are only 600 universities. More than 800 million Muslims are absolutely illiterate (Hussain, 2007)

Pakistan and Knowledge Economy

Education

Education is vital to progress and indispensable for survival in modern era of information and knowledge based society. Knowledge and education is a process to give intellectual, moral and social institutions to people. Pakistan is young and energetic nation, having only nuclear power in Muslim world, have lot of responsibility to lead the Muslim Ummah. But the picture of educaiton and knowledge in very disappointing and discouraging. Literacy ratio is nearly 55% with 23964 high schools, 1202 degree colleges, and 124 universities alongwith 12448 deeni madaris. Pakistan’s public expenditure in education is nearly 2.42% of GDP during 2007-2008 (Pakistan, 2008). Universal primary education needs to be viewed as the first rung on the ladder of development. Hasan (2010) reported that 30 million children in Pakistan have no schooling and those who are getting
schooling is of very low standard.

The higher education system produces the teachers that are the most critical component of the entire education system, the graduates who power the "Knowledge Economy" and the researchers who unleash the power of critical thinking. At present out of 7000 faculty members in our universities, only 1700 have Ph.D. degree. Each of the public sector universities needs to have at least 300-400 Ph.D level faculty members (at least 15-20 per department) before it can be regarded as a genuine "University". For this purpose an additional 15,000 - 20,000 persons will need to be sent for Ph.D. level training to suitable foreign institutions. (Arif, 2008) At present only 2.9% of students aged between 18-23 have access to higher education as compared to 70% of the same age group in Korea 28.2% in Malaysia and 10.5% in India. Pakistan has only 72 researches in one million population whereas 4828 researches in Israel, 2193 in Korea, 454 in China and 149 reserchers in one million inhabitants in India. (Global Competitive Report 2004-05) Forty years ago, Pakistan and South Korea had virtually the same income per capita. Today, South Korea's GDP per capita, at $ 10,550 is 21 times higher than Pakistan's, at $ 500. Some reckeon that half of the difference is due to South Korea's greater success in acquiring and using knowledge (Omer 2003). There are multiple problems in our educational system. These include poor quality of teachers, low student motivation, lack of relevance of the course content to social or economic needs, gender and class disparities, student discipline, outdated curriculum and course materials, fiscal insolvency, absence of research and lack of libraries. Students face an unsatisfactory learning environment, overcrowded classrooms, inadequate and outdated teaching materials and highly charged political situation. Education is very powerful tool and somehow we have to focus on this thing immediately.

**Information Communication Technologies (ICTs)**

The application of ICTs has become inevitable for knowledge economy. Advances in information technology are recognized drivers of productivity and economic growth in the knowledge economies of today. Pakistan has always aspired to be a leader in science and technology among developing countries, in general and among Islamic countries, in particular. Information and communication infrastructure is one of the four pillars of knowledge economy. Low cost efficient broadband communication system employing technologies across the whole spectrum is a key pillar of the knowledge economy. Our society is undergoing profound and rapid changes. Pakistanis’ attitude towards major information society application such as distance learning (Virtual University), computer-supported political participation, governmental information services (e-government), online jobs, telecommunication and mobile phone sector, satellite dishes, Cable televisions, mushroom growth of TV Channels, and the Internet are the prominent indicators of emerging information society. The establishment of National Digital Library of HEC is the hallmark with access to international scholarly literature based online delivery, providing access to high quality, peer reviewed journals, database and articles, more than 20,000 journals can be accessed through this library. (Shafique, 2008)

No doubt, Pakistan is advancing but the present scenario manifests gloomy picture in this regard and Pakistan ranked 98th out of 134 countries. This is indicative of a weak information and communication technology base. In order to improve its network connectedness, Pakistan should invest more in ICT infrastructure, related services and more broadly, innovation. ICT has encouraged transparency in government processes and improved countries’ efficiency and services to citizens. According to this report, Denmark, (5.85 Scores) Sweden, (5.84 Scores) and United States (5.68 scores) secured the top three ranks respectively, further consolidating the fact that they have the most solid information and communication technology base. Korea stand on 11th position with 5.37 scores, India 54th with 4.03 and Pakistan has 3.31 scores. (World Economic Forum 2009)
Libraries

Libraries play crucial role in social and economic development of any country. Libraries also contribute towards education, positive politics, expansion of business, medical sciences and health care delivery and agriculture and industrial sectors. Public libraries have been called as public universities, one the great source of self learning and vital means of attaining the excellence in knowledge economy. According to IFLA standards, there should be one public library for every 3000 people (Bhattacharjee, 2002).

First look the glimps of glorious past, Muslim in Spain and Baghdad established great universities and grand libraries. It is said that 400,000 volumes of books in the spanish libraries alone were many times more than all the books assembed all over Europe. The ‘House of Wisdom’ was set up by Caliph al-Mamun in 1004 A.D. in Baghdad, it was the greatest “think tank” the medieval world had ever seen. Historians list thirty-six libraries in Baghdad alone around the middle of the thirteenth century, and that does not include the House of Wisdom! There were similar libraries in Cairo (Egypt), Aleppo (Syria) and the major or cities of Iran, Central Asia and Mesopotamia. In addition to the central government libraries, there was a huge network of public libraries in most big cities, and prestigious private collections which attracted scholars from all parts of the Muslim world. (Hussian, 2007)

Now comes to the present library scenario of Pakistan, there is no exact data of libraries whereas it is assumed that there are nearly 8000 libraries in Pakistan. The condition of libraries, except some university and special libraries, is very pathetic. There is no organized public library system, mostly subscription libraries, are under the charge of municipal, local bodies and educational department. The majority of public libraries occupy temporary buildings and their holdings are mainly out of date fiction and books on history and Islam (Mahmood, 2005). The services are very limited. Libraries urgently need the legislation, Library Act 2010 is in pipeline. There are nearly 300 public libraries in Pakistan (Mahmood, 2008) whereas in India, 59,000 public libraries exist. Haider (1998) analysed the that only 33 public libraries with the collection of 10,000 or more volumes in Pakistan. By the end of 2000, Russia had 64,500 public libraries making it the country with the largest number of libraries in the world. The figure for exceeds Lenin’s projected number of 50,000 public libraries as set out in the communist party’s manifesto of the 1920’s (Khan, 2008).

There are approximately 200,000 schools in the public sector have no libraries at all. In order words we are educating our children in ‘Bookless’ institutions. In the education policy of 1972-1980 People’s Party Government, Zulfiqar Ali Bhutto had promised to established 45,000 libraries. If this policy had materialized what a beautiful library scenario would have been today (Mustafa, 2002). United States (2010) has total 1,22,566 libraries, out of which 99,180 (80%) libraries are associated with school.

Book Publishing Industry

Muslims attached great importance to books; within two hundred years after the death of the Prophet Muhammad, the book industry was to be found in almost every corner of the Muslim world. The whole of Muslim civilization revolved around books. Libraries (royal, public, specialized, and private) became common. Bookshops were found almost everywhere and book authors, translators, copiers, illuminators, librarians, sellers, and collectors from all classes and sections of society, of all nationalities and ethnic backgrounds, competed with each other in the making and selling of books.
According to Pakistan National Bibliography, the book trade is poorly developed in our country and the average publications are 1200 titles annually (Mustafa 2007). In Egypt only three hundred titles published annually whereas in Israel more than 4500 titles published every year. Now after the end of cold war, America is ruling the world because having one of the big book publishing industries, great number of universities and biggest libraries of the world. United Kingdom claims having the highest book publishing country of the world, in 2006, the number of new titles of books reached 206,000, while in America the number is 172,000 new titles in same years (Wikipedia 2009). India having 65% literacy rate, 7th largest publisher in world, published 82,537 titles in 2008 with 16,000 publishers (Indian Publishing, 2009). Publishing is a significant creative industry would only flourish when literacy ratio increases. In order to develop book publishing industry in Pakistan, we need strict implementation of copyright laws, promote intellectual property rights, develop reading habits, increase number of libraries, provide foreign books to local readers on low prices, and access of universal education to everyone.

**Brain Drain**

Brain drain term was coined by the Royal Society of London to describe the emigration of “scientists and technologists” to North America from Post-war Europe. Brain drain is also known as human capital flight, and flight of creative class, There are many reasons of large scale emigration of individual with technical skills normally, due to conflict, lack of opportunity, political instability and social injustice. (Wikipedia 2009a) According to official estimates of Pakistan’s Overseas Employment Corporation, close to 36,000 professionals, including doctors, engineers and teachers, have migrated to other countries in the last 30 years. (YesPakistan, 2010) This figure is indicates only small proportion of actual migration, majority of emigrants do not register. Syed Irshad Ali (1987) reviewed some of the reasons that why our senior librarians left their homeland and to get a job in foreign because of poor working conditions, non-acceptance of their rights, non-recognition of their position, non availability of a progressive grade structure, administrative redtapism, pay for the book loses etc. Asif J. Mir writes that we cannot achieve long term economic growth by exporting our human resources. In the new world order, people with knowledge drive economic growth. The Pakistani government is trying to lure back its foreign educated professionals by tweaking its salaries, housing and job incentives. Whatever the solution it needs to come fast and it needs to be come now otherwise, “when the educated are away, the uneducated will play” as they are playing at the moment. (Sarfraaz, 2008)

**Good Governance**

Good Governance has direct connection with knowledge economy. Governance is the exercise of power or authority – political, economic, administrative or otherwise, to manage a country’s resources and affairs. Good governance means, competent management of a country’s resources and affairs in a manner that is open, transparent, accountable, equitable and responsive to people’s needs. The prime responsibility of government is to eradicate main problems by effective decision making and their implementation. Pakistan at the moment needs a strong leader who is a symbol of national unity and can champion the cause to human rights for the oppressed communities and minorities. Quaid-i-Azam Mohammad Ali Jinnah had set a model of good governance which is unique and, perhaps, unachievable for any head of Government or State in Pakistan. (Sadruddin, 2009)

**Recommendations**

World Bank report points out, knowledge also illuminates every economic transaction, revealing preferences, giving clarity to exchanges, informing markets. It
is lack of knowledge that causes markets to collapse, or never to come into being. The need of knowledge, understanding and education has never been more imminent and strong than what it is today. The whole concept of growth, progress, prosperity and development is based on the acquisition of knowledge, technology and science. Without these requisites hardly any move can be made towards the destination, objectives and goals which the modern nations generally and Pakistan particularly have set for themselves. We must need to address all the above mention point immediately, to create knowledge oriented society. We have to study and understand the basic teaching of Islam, which not only encourage learning but declare it as fundamental duty of every Muslim to learn actively. We have to start from compulsory basic education for all section of the society, to higher education which develop creative, innovative, critical thinking and novel ideas. Creativity and innovation act as a catalyst and accelerate success in knowledge oriented economy. It is imperative to revolutionize our education system with the corresponding changes in the field of science and technology to boost competitiveness. We have to maintain good governance by rule of law, remove the dilemma of brain drain by providing better job opportunities to skilled worker. It is dire need not to establish new state of the art libraries, but to develop the existing libraries with latest technologies, promote the reading habit & library culture and encourage the book trade industry by giving them due rights to authors.

**Conclusion**

Knowledge is our intellectual heritage and accruing it, along worldly benefit, is a religious duty too. 5T theory (Technology, Task, Tool, talent and time) should be kept in mind and should be understood and implement at gross root level in all section of the society. “Give a man a fish, and he will eat for a day. Teach him how to fish, and he will eat for the rest of his life.” Chinese Proverb

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