

ARE THE MUSLIM COUNTRIES DOING ENOUGH TO PREPARE THE NEW GENERATION FOR TOMORROW?

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ABSTRACT

Muslim countries home significant world population and are rich in natural as well as human resources. In this study an attempt has been made to see what the Muslim countries are doing for the development of brain capital through the promotion of education. To find out the answer to this question twenty four Muslim countries with the largest population have been included in this study. These countries represent 81% (1.22 Billion) of the Muslim population living in the Islamic countries. Four non-Muslim countries, UK, France, South Korea and Israel, have also been included in this study in order to make comparisons. To assess and evaluate condition of education in these 28 countries primary data was collected from UNESCO Institute of Statistics (UIS), The World Bank, International Monetary Fund (IMF), International Association of Universities. The results show that there is an under-investment in education at all levels, in all the Muslim countries; in many countries education systems are outdated; education is faced with lower participation ratio and quality of the higher education is questionable. In a nutshell Islamic countries are not well prepared for tomorrow and there is urgent need to make education the first priority with a focus on human capital formation and brain capital development.

Keywords: Muslim countries, education, human capital

INTRODUCTION

We are passing through intellectual era where brain capital is considered as a principal factor of production which governs the other factors; land, labour and capital. It is evident that the countries with ample brain capital are surpassing the others in every field of life. Education plays a key role in the formation of brain capital. Today good human capital is that which has good brain capital. To bring a change in a society it is imperative to produce good minds and this can only be achieved through quality education and proper training. Today's knowledge based global society demands high order competencies and skill which are only possible through education. Perhaps because of this reason the importance of education is universal in nature. Education in general and higher education in particular is important for all countries because it contribute to their economies, effective management and timely policy-making and policy-reforms in their governments as well as to their civil societies, and to the preservation of their national histories, cultures, values and identities (Johnstone & Marcucci, 2007). Research has shown that higher education is playing an important role in the generation, dissemination and effective utilization of knowledge for building technical, and professional capacity, and for developing other resources that result in economic growth (Haddad, 2005).

During last few decades unprecedented expansion of knowledge, proliferation of technologies and higher competition on the economic front have led to varied outcomes of education for all societies in the world depending upon the readiness of a society. To compete in today's knowledge based global society the role of education, especially higher education, has been redefined and its importance has further augmented. "Knowledge is now recognised as the driver of productivity and economic growth, leading to a new focus on the role of information, technology and learning in economic performance" (OECD, 1996).

There are 196 independent countries in the world and 58 of them are Muslim-majority countries. These Muslim countries collectively make the Islamic World. Most of the Islamic countries are rich in

natural and human resources. Muslim world is not confined to the Arab region only but it is stretched in three continents; Asia, Africa and Europe. Muslim countries share a beautiful blend of religious, political, lingual, cultural, socio-economic and environmental diversities and commonalities. Although no one can deny the beauty of unity but in the Islamic world the paradigm of “unity in diversity” prevails. Today Muslim countries, like the rest of the countries on the face of earth, are facing the new challenges of knowledge based society in more globalize scenario. Now the question arises that what are the Muslim countries doing for the promotion of education? How are they responding to changing needs? What is the actual state of education in these countries? This study has been designed to answer some aspects of these questions by evaluating the present state of education in the selected Muslim countries.

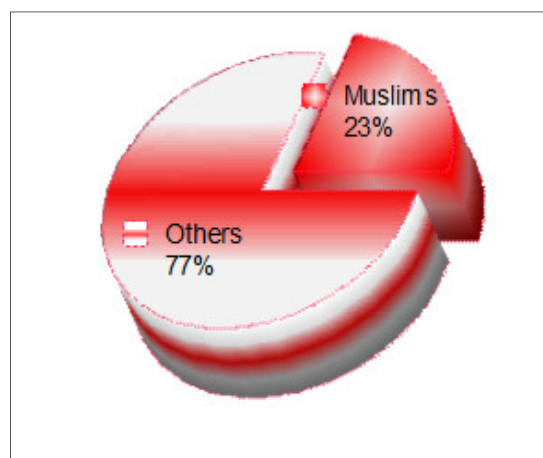


Figure 1. Share of Muslims in world population

The importance of knowledge is universally accepted; moreover in Islam acquisition of knowledge is obligatory for all followers without any gender discrimination. According to the Holy Quran “whoever is given knowledge is given indeed abundant wealth”.^{†††} The prophet of Islam, Mohammad (s.a.w), said, “Acquisition of knowledge is obligatory for every man and woman”.^{‡‡‡} Education has its importance in all domains of the life. In this rapidly changing world the importance of tertiary education has further increased increasing tertiary education may be important in promoting faster technological catch-up and improving a country’s ability to maximize its economic output (David Bloom *et al.*, 2005).

Before going into details it seems appropriate to have a bird’s view of Islamic or Muslim world. Today Islamic world comprises of 58 Muslim states where 81% (1.22 Billion) of the total world Muslim population. Muslims population living in these countries accounts for 19% of the total world population while together with the Muslim inhabitants living in the rest of world this ratio reaches approximately at 23% (1.61Billion)^{§§§} of the total world population 7.03 Billion. Among the Muslim countries a large variation on the basis of the total Muslim population and country area can be seen. On the one end of the spectrum there is Indonesia with a largest Muslim population (228 Million) while on the other end there are smaller countries with a Muslim population of less than one million; Maldives, Brunei, Djibouti, Qatar etc.

Though Muslim world has a large population but mere number of heads are not sufficient in this era because today brain train and human capital formation is more important than heads count and the development and formation of human capital can only be possible through education. Research conducted by Behrman *et al.*, (1997), Card, David (1999), Currie *et al.*, (2003), Dee *et al.*, (2004), MacMahon, Walter (1999) have found significant effect of education on the person’s individual and collective life; higher income, better health level, increased sociality, enhanced employability,

^{†††} The Holy Quran (2:269)

^{‡‡‡} Abu Abdullah Muhammad (875) *Ibn Maja in al-Sunan*, 1:81 §224

^{§§§} <http://www.islamicweb.com/begin/population.htm>, http://en.wikipedia.org/wiki/Islam_by_country

productivity and raised adaptability to the technological change in the society (OECD, 2007). Education is most significant driver of lifelong learning. Thus demand of education is on the rise almost every part of the world.

In this study 24 highly populated Muslim countries^{****} have been included which represent 92% (1.48 Billion) of the total Muslim population living in the Islamic countries and 75% of the total Muslims living in the world. Four non-Muslim countries, France, Korea and Israel, have also been made part of this study in order to make comparisons. The selection of these four countries has rationales; like the selected Muslim countries, South Korea and Israel are also developing countries with rapidly emerging economies. Korea in Asian context is a small sized country on the basis of population and it is considered as tiger economy of Asia, while Israel is one of the smallest countries in the Middle-East region by population but it is developing very rapidly. One more important fact is that Korea and Israel appeared on the world map after World War II, like the majority of the Muslim countries. While France and United Kingdom, in European context, are large nations; these are developed countries with big population and advanced economies. Historically the case of France and UK is quite different from the rest of the selected countries: both countries were colonizers while majority of the Muslim countries. Thus both countries had and they have greater impact on the systems in the Muslim world; Administrative system, justice system, education system, economic system etc. So it is appropriate to take both countries to have a comparison with the rest. Certainly this comparison can help us to have a better understanding and it may guide us in which direction to go and still how far to go.

The selected Muslim countries have gigantic pool of human resources. In the Muslim world Indonesia with 227 Million population (annual growth rate 1.4) is the largest state, it is home of 13.6% of the total Muslim population in the world, Pakistan 180 Million (annual growth rate 2.4) 10.7% of the total Muslims in the world, Bangladesh 168 Million (annual growth rate 1.9) 8.4% of the total Muslims in the world, Nigeria 147.8 Million (annual growth rate 2.2) 4.3% of the total Muslims in the world, Egypt 75 Million (annual growth rate 1.9) 4.7% of the total Muslims in the world, Iran 67.3 Million (annual growth rate 1.4) 4.5% of the total Muslims in the world, Turkey 69.7 Million (annual growth rate 1.3) 4.7% of the total Muslims in the world. In these eight countries 50% of the total Muslims of the world are living^{††††}.

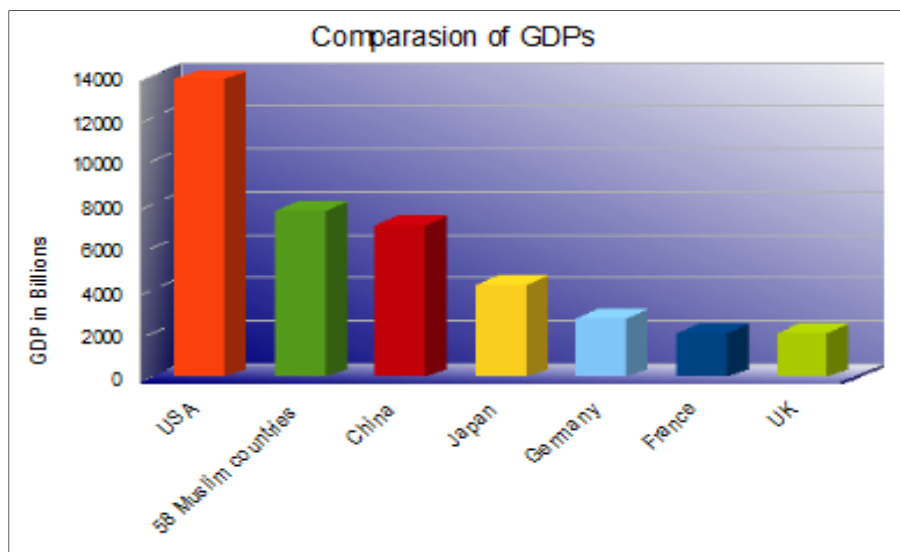


Figure 2.

Large population for a country is at the same time an opportunity and a challenge, as it draws considerable share of public resources and compel the state to devise long term policies and prudent

^{****} (Afghanistan, Algeria, Bangladesh, Burkina Faso, Egypt, Guinea, Indonesia, Iran, Iraq, Kazakhstan, Malaysia, Mali, Morocco, Nigeria, Pakistan, Saudi Arabia, Senegal, Sudan, Syria, Tunisia, Turkey, and Yemen)

^{††††} <https://www.cia.gov/library/publications/the-world-factbook/> http://en.wikipedia.org/wiki/Islam_by_country

plans. However it provides magnificent opportunity for any country to develop and shape this capital according to future needs and utilize this brain capital for social, economic and cultural development. Only those countries, who invest in human capital today for tomorrow, can benefit from it. "Singapore and Korea are among other rapidly emerging economies of the world, the fruits of development and prosperity which they are reaping today its seed had been sown in before 1980s and this they did by investing in human capital formation".^{§§§§}

As far as financial resources are concerned Muslim countries are economically very weak as compared many non-Muslim countries with similar demography; all 58 Muslim countries of the world have a combined GDP of 7748 Billion US\$ while USA alone has GDP of 14582 Billion US\$ which is three times bigger than what all, rich and poor, Muslim countries produce. Likewise China with GDP of 7055 Billion US\$ approximately equal to the combined GDP all Muslim countries. Japan with GDP of 4283 Billion US\$, Germany 3317 Billion US\$ and France 2772 Billion US\$^{§§§§} outperform on the economic horizon as compared to Muslim world. Here one point should be noted that higher GDP of the majority of the gulf countries is because of the mineral oil.

According to The World Bank Gross Domestic Product (GDP) ranking 2010, no Muslim country is among the top 15 GDPs of the world while on the other hand four Muslim countries are among the top fifteen most populated countries. This imbalance between GDP and Population in the Muslim countries has a negative impact on GDP per capita. Among the selected countries, people in France, Israel and Korea have higher income level as compared to all other Islamic countries in the list with an exception of Saudi Arabia. While Indonesia, Pakistan and Bangladesh are on the top in population table of selected countries but they are very low in the per capita GDP column; more than ten times less than France or Israel.

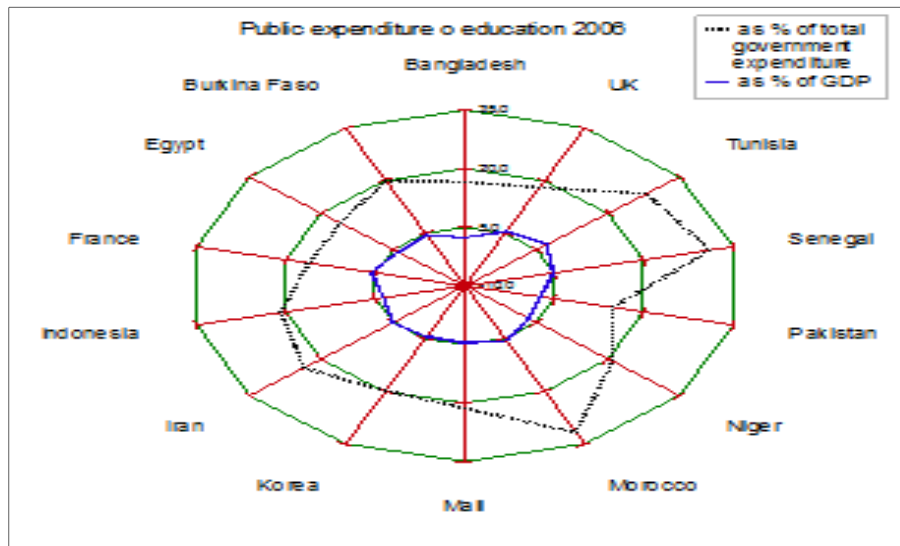


Figure 3.

Like all other resources human capital plays an important role in the economic development of any country. But if this valuable human capital is not developed, shaped and refined to make it more productive then it is harder for that nation to keep pace with other nations. Despite proven economic and social returns of education, it seems that as if education is not among the priorities in the Muslim countries. Among the selected countries Tunisia is the only country that is spending 7.2 % of the total GDP which is higher than what share of GDP Israel (6.3%), France (5.7%) and UK (5.5%), are spending on education. Whereas, large Muslim countries are comparatively spending very less on education, as share of their total GDPs; Indonesia (3.6%), Pakistan (2.6%), Bangladesh (2.5%), Niger

^{§§§§} OECD Insight 2007

^{§§§§} World Development Indicators database, The World Bank, 2007

(3.4%), Egypt (3.6%) and Iran (5.1%)****. Here one thing is worth mentioning that Tunisia is spending 7.2% of GDP on education that is equal to 5.9 Billion US\$ only, while France is spending 5.7% of GDP on education and that is equal to 121.4 Billion US\$, so France is spending 22 times higher what Tunisia is pouring in education sector.

Similarly when comparing Iran with Israel, public spending on education in Iran is 5.1% of the GDP it means an expenditure of 45 Billion US\$ while Israel is spending 6.3% of the GDP, this share is equal to 12.6 Billion US\$, if we consider the size of population of both countries, Iran has 10 times bigger population than Israel but its budget for education is merely 4 times bigger than that of Israel. Keeping all three indicators; population of a country, total GDP and expenditure on education, one can weigh the reality that in all Muslim countries education is a prey of under-investment. This under investment in education is worst in the bigger Muslim countries; Indonesia, Pakistan, Bangladesh, Turkey, Niger etc. To overcome this problem of under-investment, all Muslim countries need to increase expenditure on education at least by four to ten times. Muslim countries are not investing significant resources for developing education, in general and tertiary education in particular; as a result both quantitative and qualitative deterioration in education can be witnessed.

According to the UIS data on per pupil expenditure, Burkina Faso and Niger spend more than 30% of per capita GDP on per pupil studying at ISCED1 or primary level, while some countries like Bangladesh and Kazakhstan spent less than 10% of per capita GDP on per student at ISCED1. Whereas Israel spends more than 20%, United Kingdom, South Korea 19% each and France 17.4% of per capita GDP on per student.

Country	ARWU	THES	Total universities in the country
FRA	23	23	321
KOR	8	10	204
ISR	6	4	20
TUR	1	5	98
MYS	0	5	41
IDN	0	3	431
PAK	0	2	111
IRN	0	1	116
SAU	0	1	15
AFG	0	0	12
DZA	0	0	64
BGD	0	0	72
BFA	0	0	5
EGY	0	0	119
GIN	0	0	10
IRQ	0	0	23
KAZ	0	0	57
MLI	0	0	2
MAR	0	0	122
NER	0	0	6
NGA	0	0	61
SEN	0	0	11
SON	0	0	36
SYR	0	0	12
TUN	0	0	33
UZB	0	0	64
YEM	0	0	15

Figure 4.

**** UNESCO, UIS data 2010

Among these selected countries, per pupil public expenditure as share of GDP per capita at ISCED 2 and ISCED3 (Secondary level) is highest in Niger 46%, followed by Morocco 35% , Mali 32%, France 27%, South Korea 23%, UK 21%, Israel 20% while Iran spends only 11%, Kazakhstan 8% and Senegal hardly 3%. Combined per pupil Expenditure on all levels as a share of GDP per capita is comparatively very low in Iran (12%), Bangladesh (11%), and Kazakhstan (8%) while some Muslim countries are spending higher share on education keeping in the view small volume of country GDP; Burkina Faso (35%), Morocco (28%) and Tunisia(26%). Here also one point to be noted that France, Korea, UK and Israel have up to ten times higher per capita GDP among these selected countries except of Saudi Arabia. So France, Korea, UK and Israel are spending ten to twenty times more than Muslim countries. Investing in education is not like passing liquid through a funnel: here it goes in and there it comes out but this investment is rather like sowing a fruit seed which has many stages and takes sufficient time to bear the fruits. Appropriate education that suits the social requirement has guaranteed benefits.

Excellence in human capital production depends upon quality education. Today countries are pursuing and assuring quality in education especially at tertiary level in order to produce human capital which has greater worth in market and which has higher productivity at workplace. International rankings of the universities are effective measuring stick to assess the quality of education in a specific country, though world rankings of the universities are controversial but the concentration of world ranked institution in any country gives a general indication of the excellence of education that prevails in that country.

Two international rankings of world's top 500 universities, ARWU^{††††} and THES^{‡‡‡‡}, the performance of universities in the Muslim world is not bright. According to the Academic ranking of world universities (ARWU) 2008: among the selected countries France has 23 of the top 500 universities of the world, Republic of Korea has 8, Israel has 6 while Turkey is the only Muslim country which has one of the top 500 universities of the world. Whereas in the Times Higher Education (THES) ranking of the world universities eight Muslim countries (Turkey, Malaysia, Indonesia, Pakistan, Saudi Arabia and United Arab Emirates) have only 18 out 500 world class universities, while in the selected countries for this study France alone has 23 world ranked universities while Korea has 10 and Israel has 4 world ranked universities.

Availability and accessibility of education facilities are of great importance. According to IAU^{§§§§} in the selected Muslim countries where 19% of the world population is living they have less than 10% of the total world universities of the world. In these Muslim countries there are 1536 universities for 1220 million population (1.2 universities per million population) while in USA alone there are more than 1800 universities for 301 million population (6 universities per million population), in France 321 universities for 62 million people (5 universities per million population), Korea has 204 for 49 million people (4 universities per million population), Israel has 20 universities for 7 million people (2.8 universities per million population).

Perhaps due to the lack of availability and accessibility of universities in the Muslim countries the participation rate is also very low at tertiary level. According to UNESCO data, in the cohort of highly populated Muslim countries, tertiary education participation rate is the highest in Kazakhstan (53%), followed by Iran (35%), Turkey (35%), Tunisia and Saudi Arabia (31%) each whereas Niger, Burkina Faso and Afghanistan less than 2.5%. Indonesia, Bangladesh and Pakistan being top ranked countries on population scale have an unsatisfactory tertiary education participation rate of 17%, 7% and 4.5% respectively. While in Korea, UK, Israel and France participation rate at tertiary level is 93%, 59%, 58% and 56% respectively. Combined gross enrolment ratio at tertiary level for these four non-Muslim countries is 65% (8 million youth out of 11.7million) while in Muslim countries combined gross enrolment of all selected Muslim countries is not more than 17%. In other words out of 128 Million youths^{*****} in 25 selected Muslim countries only 19 Million are enrolled in tertiary education, while

†††† Academic ranking of world universities, ARWU, 2008, (<http://www.arwu.org/>)

‡‡‡‡ Times Higher Education Supplement, THES, 2008 (<http://www.timeshighereducation.co.uk/>)

§§§§ International Association of Universities 2009; http://www.unesco.org/iau/online_databases/list.html

***** According to the United Nations definition, "youth constitutes people between the ages of fifteen and twenty-four".

109 Million youths are away from tertiary education^{†††††}. In other words, today 83% of the Muslim youths are entering into the labour market without tertiary education. Simply we can conclude that they are not equipped with necessary competencies to compete with the rest of world in a long run; consequently they are not capable of playing any significant role in the knowledge economy of their countries and as well as of the world. Skills, knowledge, competencies and intelligence, in this globalize world of knowledge, help people gain personal economic and social benefits but it also enable them to play an active role in broadening the economic base of their country. But those who have neither trained brain nor skilled hands, they have no option except to co-exist with lifelong social and economic problems and hardships of life.

No one can deny the importance and role of a teacher in education at all levels^{‡‡‡‡‡}. Working conditions and work load has a direct impact on the efficiency of a teacher. Pupil-teacher ratio tells about the working conditions, working load and human resources devoted to education. In the majority of the Muslim countries, pupil-teacher ratio is very high at primary level (ISCED1): in Mali it reaches up to 56 pupils to one teacher, Burkina Faso 46, Guinea 45, Niger 40 and Pakistan and Senegal one teacher for 39 pupils. In Bangladesh and Sudan the picture is not very much different. Kazakhstan is the only Muslim country where pupil teacher ratio is much better; one teacher for every 17 students. In Israel one teacher for 14 pupils, in UK 18pupils, in France 19 pupils while Korea stands in the middle, one teacher for every 26 pupils in primary schools. At level ISCED2 also in the majority of the Muslim countries pupil teacher ratio is very high except some countries like Kazakhstan, Indonesia, Iran and Tunisia. While at level ISCED2 or secondary level pupil teacher ratio is little improved in many Muslim countries but as compared to Israel, France (one teacher for every 12 students). In the Muslim world there a great need to put more human resources in education to increase the efficiency of institutions and improve the quality of education.

According to the Islamic teachings, female education is as important as male one. In the Muslim countries female participation rate at ISCED 1, ISCED 2 and ISCED 3 is quite satisfactory except that of Niger (40%), Pakistan (42%), Burkina Faso (42%), and Mali (40%). As discussed earlier that over all participation ratio (male female combined) at tertiary level in the selected Muslim countries is 17%, but surprisingly females participation ratio at this level surpass males in 6 selected Muslim countries (Tunisia, Saudi Arabia, Malaysia, Kazakhstan, Iran and Algeria) like in France, UK and Israel^{§§§§§}. Whereas in Korea, Burkina Faso, Mali, Niger, Iraq and Bangladesh female participation at level ISCED 5 and 6 is less than 40%. In Pakistan, Morocco, Turkey and Indonesia the divide is not very large: female participation rate in tertiary education is more than 42%. From this one fact has crystallized that if an opportunity is given to females to come forward then they do not keep them behind in any way.

There is a direct relation between the number of years of schooling and level of knowledge and competencies acquired. Certainly this knowledge and acquired competencies are direct measure of human capital development. In UK duration of compulsory education is 12 years, while in France and Israel compulsory education lasts for 11 years. Uzbekistan is the only Muslim country in the list of 25 countries where 12 years of education is compulsory. Kazakhstan and Tunisia have 11 years of compulsory education. In Pakistan, Iran and Bangladesh the duration of compulsory education is only 5 years, which is the lowest among all selected countries. Likewise in Iraq, Saudi Arabia, Malaysia, Guinea, Niger and Senegal duration of compulsory of education is merely 6 years.

In the context of five or six years of compulsory education it is totally incomprehensible that how can a child of age ten or eleven compete in the labour market? Does this age appropriate work? Can this child pursue lifelong learning? Can this child (with 5 or 6 year of compulsory schooling) compete with a youth who has 11 or 12 years of compulsory schooling? Certainly not at all, if this child does not get more education and he/ she depends upon compulsory education only then she/ he will never afford competition at any level in any field.

††††† UIS Data 2006

‡‡‡‡‡ OECD, 2005 J.E. Rockoff (2004), Paul & Daniel (2004),

§§§§§ UNESCO Data 2006

In the majority of the Muslim countries duration of compulsory education comparatively last fewer years. Perhaps this is one of the key factors that lead to lower participation in higher education in these countries as compulsory education ends long before the higher education comes so these students are sucked by labour market. For example in Bangladesh, Iran and Pakistan compulsory education ends at the age of ten years only while entrance in tertiary level usually starts at the age of 18 or more. In this way major part of this precious human capital remain undeveloped that results in low-productivity. Furthermore those countries which provide little compulsory education to the new generation or which have lower education rate for these countries it is becoming harder and harder to compete with those which have respectable level of education with the assurance of quality. Definitely societies with high level of knowledge have advanced in the high-tech, research and development so they are enjoying higher and sustained returns with comparatively lesser efforts.

CONCLUSIONS

Islam has made education obligatory but analysis of the data shows that majority of the Muslim countries' overall participation rate at all levels is very low, in many countries education systems are outdated and quality of education in the Muslim countries is also questionable consequently Muslims are lagging behind, in all fields of life, from the rest of the world.

Brain is more powerful than brawn but it does not mean one should put all energies in brain capital development or brain training, and human capital formation should be overlooked. In this regard the best approach is finding a balance between both capitals by capturing market signals and demand of time. Muslim countries are rich in human resources but these countries are not doing sufficient for the formation and development of human capital. They need to reset their priorities and increase investment, both human and material, in education sector.

Muslim countries are not giving appropriate opportunities to their new generations to fully develop their abilities, capabilities and capacities, as a consequence their future prospects is shrinking and minimizing, certainly this will result in reduced opportunities and marginalisation from the economic, technological and social mainstream. The gap inter and enter regions is increasing rapidly. Education is the only force that can help bridge this gap but those countries which are wasting time, energies and resources, for them this fissure is going to reach at a point where it will be unbridgeable. So it is the right time to take right decision of using the force of education to avoid technological and economic imbalance tomorrow, this one stitch in time will save nine.

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