Educational Conditions of Muslim Majority Countries in Comparison to the Leading Nations

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ABSTRACT

Background: Muslims are the Second largest Religious group after Christians in the World and ruling on around fifty one Countries and own more than 80% Oil Reserves of the World. But in respect of Educational progress they are far behind from their neighboring Countries. Objectives: This essay seeks to highlight the Educational conditions of Muslim Majority Countries in the World at present. Findings: The conditions of Muslims are worse than one can expect without observing the data presented in this Article. For Instance, 51 Muslim Majority Countries collectively have 2313 Universities, while USA alone have 2138 Universities, Brazil 1844, Philippines have 1321 Universities etc. Discussion: An attempt has been made in this essay to analyze the representation of Muslim Majority Countries in the field of education in comparison to some leading nations of the World in the light of latest data available.

Key Words: Muslims Majority Countries, Muslim Education, PhDs by Country, Planetariums, CIA World Fact Book, Number of Universities, University Ranking.

INTRODUCTION

Education plays a crucial role in the all-round development of a nation or community. It puts the foundation of industrial and economic development. But the educational conditions of Muslims in the whole World are Substandard. Globally the definition of literacy is 'at the age 15 one can read and write'. The average literacy of the 'World' according to CIAWFC (CIA World Fact Book, 2012) is 84.1%. In Males 88.6% are literate and in Females 79.7%.

Almost three-quarters of the World's population; 775 million of illiterate adults are found in only ten countries (in descending order: India, China, Pakistan, Bangladesh, Nigeria, Ethiopia, Egypt, Brazil, Indonesia, and the Democratic Republic of the Congo); of all the illiterate adults in the world, two-thirds are women; extremely low literacy rates are concentrated in South and West Asia and Sub-Saharan Africa (CIA World Fact Book, 2012) It should be noted that out of these ten, six are MMCs and one is India which has the second largest Muslim population in the World. Similarly if we see other indicators such as in Pakistan 23 daily newspapers per 1000 citizens while in Singapore 460 per 1000 citizens (pewforum.org, 2011). In UK book titles per million is 2000 in Egypt book titles per million is only 17 (pewforum.org, 2011).

In the Table below the literary conditions of all MMCs has been presented in comparison with the leading nations of the world- USA, China, Israel and the World. The literacy rate of MMCs ranges between 28-90 %. Indonesia has the highest literacy- total: 90, male 94 female 86 whereas Nigeria has the lowest- total 28, male 42 and female 15. In addition 6 countries have

les then 70% in total literacy. In total, 'Muslim World' has the lowest rates of adult literacy correspond to the highest population growth rate (Spengler, 2005). In all of the MMCs the rate of female literacy is very low in comparison to males. While the literacy rate in USA is 99% in total as well as same in males and females.

Methodology

Mostly in the tables at first the representation of MMCs in a particular field is mentioned afterwards the representation of other leading nations is presented so that the reader can easily compare and analyze the conditions of MMCs in that field. We have tried our level best to collect the data from the latest data sources however in few cases the very recent changes may not be included. A large proportion of data is collected from the latest version of CIA World Fact Book. In several places the Acronyms were used in place of different terms. The full forms of those acronyms are given below in the table in Attachment 1.

Table 1 Literacy Rate

No.	Country	Literacy rate % Total/M/ F	%EB
1	Afghanistan	28/43/12	-
2	Albania	99/99/98	-
3	Algeria	70/80/60	4.3
4	Azerbaijan	99/99/99	2.8
5	Bahrain	95/96/92	2.9
6	Bangladesh	57/61/52	2.4
7	Brunei	93/95/90	-
8	Burkina Faso	22/29/15	4.6
9	Chad	35/45/24	3.2
10	Comoros	75/80/70	7.6
11	Djibouti	68/78/58	8.4
12	Egypt	72/80/63	3.8
13	Guinea	41/52/30	2.4
14	Indonesia	90/94/87	2.8
15	Iran	77/83/70	4.7
16	Iraq	78/86/71	-
17	Jordan	93/96/89	0
18	Kazakhstan	99/100/99	2.8
19	Kosovo	92/97/88	4.3
20	Kuwait	93/94/91	3.8
21	Kyrgyzstan	99/99/98	5.9
22	Lebanon	87/91/82	1.8
23	Libya	89/95/82	-
24	Malaysia	89/92/85	4.1

continue Table 1

25	Maldives	94/93/95	11.2
26	Mali	28/36/20	4.4
27	Mauritania	58/70/51	4.4
28	Mayotte	86	-
29	Могоссо	56/70/44	5.6
30	Niger	29/43/15	4.5
31	Nigeria	61/72/50	-
32	Oman	81/87/74	3.9
33	Pakistan	55/69/40	2.7
34	Palestine or West Bank	92/97/88	-
35	Qatar	96/97/95	3.3
36	Saudi Arabia	87/90/81	5.6
37	Senegal	39/51/29	5.8
38	Sierra Leone	35/50/24	4.3
39	Somalia	38/50/26	-
40	Sudan	61/72/51	-
41	Syria	80/86/74	4.9
42	Tajikistan	99/99/99	3.5
43	The Gambia	50/60/40	2
44	Tunisia	74/83/65	7.1
45	Turkey	87/95/80	2.9
46	Turkish Republic of Northern Cyprus		
47	Turkmenistan	99/99/98	-
48	United Arab Emirates	78/76/82	1.2
49	Uzbekistan	99/99/99	-
50	Western Sahara	-	-
51	Yemen	64/81/47	5.2
52	USA	99/99/99	5.5
53	China	92/96/88	-
54	Israel	97/99/96	5.9
55	World	84.1/88.6/79.7	-

Source: CIA World Fact Book, 2012

The Table 2 shows the number of Universities in MMCs with the number of Universities in other leading countries. The total numbers of universities in 51 MMCs are 2313 while USA alone has 2138 Universities, Brazil 1844, Philippines 1321 universities etc. Indonesia has the largest number of universities among MMCs that are 517. While Japan has 692 universities which have 4.9 (en.wikipedia.org 1, 2013) times smaller land area and have 1.9 (Internet World Stats, 2013) times smaller population than Indonesia. Let us compare Indonesia with Brazil.

Indonesia has 1.2 times greater population than Brazil. Moreover Indonesia has 517 universities while Brazil has 1844 universities. It implies that Brazil has 1327 more universities than Indonesia or in other words Brazil has 3.5 times more universities than Indonesia.

Table 2 Number of Universities in MMCs

Country	No. of Universities	Country	No. of Universities
Indonesia	517	Libya	13
Turkey	158	Yemen	13
Morocco	144	Chad	10
Iran	137	Kosovo	10
Egypt	125	Mali	9
Kazakhstan	124	Niger	9
Pakistan	121	Oman	8
Nigeria	103	Turk. Rep. of Northern Cyprus	8
Bangladesh	80	Burkina Faso	7
Algeria	74	Kuwait	5
Senegal	70	Djibouti	4
Uzbekistan	62	Mauritania	3
Saudi Arabia	48	Comoros	2
Malaysia	45	Sierra Leone	2
Sudan	39	Brunei Darussalam	1
Lebanon	36	Qatar	1
Tunisia	35	Somalia	1
Azerbaijan	30	The Gambia	1
Iraq	30	Maldives	-
Jordan	29	Mayotte	-
United Arab Emirates	26	Western Sahara	-
Palestine	25	Total	2313
Tajikistan	24	USA	2138
Albania	21	Brazil	1844
Kyrgyzstan	21	Philippines	1321
Syria	20	Japan	692
Guinea	17	India	601
Afghanistan	16	China (mainland)	547
Turkmenistan	15	France	343
Bahrain	14	Germany	333

Source: International Association of Universities, 2013

Muslim Universities and World University Rankings

Here we are presenting the representation of the Universities located in MMCs, in the World University Ranking League Table. There are several Institutions preparing their own University Rankings but here we are presenting QS World University Rankings (QSWUR) 2012-13 and examining the positions of Muslim Universities in it. At first a brief introduction of QS World University Rankings has given.

Quacquarelli Symonds (QS), a company that specializes in providing study abroad services, released the 2012 QS World University Rankings on September 11, 2012. In total, more than 2,500 universities were evaluated out of which more than 700 World Class Universities were mentioned in the list according to their ranks. Massachusetts Institute of Technology of USA achieved the top slot followed by Cambridge University on the second position. However, four of the six top slots in the university "league table" were occupied by the UK universities. With MIT leading the list, Cambridge fell to No. 2 spot and Harvard University ranked third in the list. University College, London (UCL), Oxford University and Imperial College took fourth, fifth and sixth places respectively. Seventh place was awarded to Yale University, followed by University of Chicago, Princeton University and the tenth position to California Institute of Technology (QS World University Rankings 2012). But it has a little to applaud for MMCs due to their undermining condition in University Education. See the table below.

Table 3 The Representation of MMCs in 'World University Ranking', in Different Ranking Groups in Comparison to Some Leading Nations of the World

	USA	UK	Canada	Japan	China	Malaysia	Saudi Arabia	Kazakhstan	Egypt	Indonesia	Turkey	Pakistan
Top 10	7	3	-	-	-	-	=	=	-	-	-	-
Top 100	31	18	3	6	3	-	-	-	-	-	-	-
Top 200	54	30	9	10	7	1	1	-	-	-	-	-
Top 400	83	45	16	16	9	5	3	2	1	1	-	-
Entire List	126	55	21	29	23	7	6	6	2	4	7	4

Source: QS World University Rankings 2012

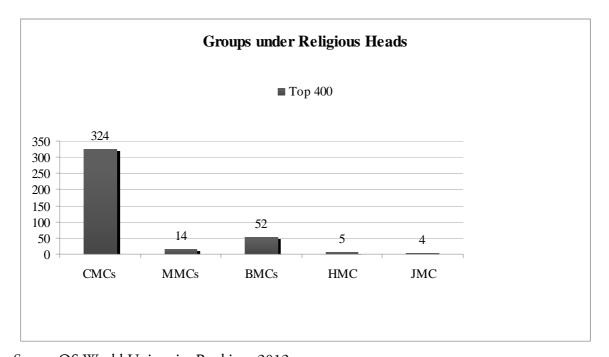
The above table shows the ranks of MMCs in QSWUR 2012. The table shows that in top ten there is no representation of any MMC University whereas USA has seven and UK has three Universities in the class. Again in top hundred there is no representation of any MMC university. In top two hundred USA have 54 universities and UK, Canada, Japan, China have 30, 9, 10, 7 universities individually respectively. While MMCs all together have only 2 Universities in the group. In the same manner in top four hundred USA, UK, Canada, Japan individually have more number of universities than collective gain of MMCs.

In total there are 61 Universities of MMCs in the list. There is no university of any MMC in the top 155 universities of the world. The First MMC University which was spotted in the list is Universiti Malaya (Malaysia) claiming 156th rank followed by King Saud University (Saudi Arabia) on 197th position. In the group of top four hundred Malaysia have five universities,

Saudi Arabia have three, Kazakhstan have two, Lebanon, Indonesia, UAE and Egypt have one each. It implies that out of 49 MMCs only seven have been represented in the Top Four Hundred category. It should be noted that, the top 400 universities were ranked individually from 1st to 400th place. The remaining universities were ranked into the following categories: Top 401-450, Top 451-500, Top 551-600, and 601+. See the table blow.

If we sort-out the list under religious heads, the results are quite surprising. There are 524 universities of CMCs, 100 of BMCs, 61 of MMCs and 11 of HMC (India) and 05 of JMC (Israel) in the whole list. While in the in the top four hundred category 324 Universities of CMCs, 52 of BMCs, 14 of MMCs and 05 of HMC (India) and 04 of JMC (Israel). It implies that the representation of CMCs is 23.14 times higher than MMCs or in other words the number of Universities of MMCs is only 4% of CMCs. While the representation of BMCs is 3.7 times higher than MMCs or in other words MMCs are only 26% of BMCs. See the chart below.

Chart 1 Distribution of Universities in 'World University Ranking' under religious heads



Source: QS World University Rankings 2012.

Table 4 Six Years Data of the Representation of the Universities Located in MMC in QSWUR

Sl. no	2012	Institute	Country
1	156	Universiti Malaya (UM)	Malaysia
2	197	King Saud University	Saudi Arabia
3	208	King Fahd University of Petroleum & Minerals	Saudi Arabia
4	250	American University of Beirut (AUB)	Lebanon
5	261	Universiti Kebangsaan Malaysia (UKM)	Malaysia
6	273	University of Indonesia	Indonesia
7	326	Universiti Sains Malaysia (USM)	Malaysia

8	334	King Abdul Aziz University (KAU)	Saudi Arabia
9	358	Universiti Teknologi Malaysia (UTM)	Malaysia
10	360	Universiti Putra Malaysia (UPM)	Malaysia
11	369	L.N. Gumilyov Eurasian National University	Kazakhstan
12	370	United Arab Emirates University	UAE
13	390	Al-Farabi Kazakh National University	Kazakhstan
14	392	American University in Cairo	Egypt
15	402	Al-Imam Mohamed Ibn Saud Islamic University	Saudi Arabia
16	403	American University of Sharjah	UAE
17	404	Bilkent University	Turkey
18	412	International Islamic University Malaysia (IIUM)	Malaysia
19	417	National University of Sciences and Technology (NUST) Islamabad	Pakistan
20	427	Sultan Qaboos University	Oman
21	438	Universitas Gadjah Mada	Indonesia
22	455	Bandung Institute of Technology (ITB)	Indonesia
23	463	Middle East Technical University	Turkey
24	503	Sabanci University	Turkey
25	507	Umm Al-Qura University	Saudi Arabia
26	515	Université Saint-Joseph de Beyrouth	Lebanon
27	526	Al Azhar University	Egypt
28	527	Bogazici Universitesi	Turkey
29	534	Hacettepe University	Turkey
30	537	Istanbul University	Turkey
31	538	Kazakh - British Technical University	Kazakhstan
32	539	King Faisal University	Saudi Arabia
33	549	Qatar University	Qatar
34	573	University of Tehran	Iran
35	577	Ain Shams University	Egypt
36	578	Airlangga University	Indonesia
37	579	Alexandria University	Egypt
38	587	Baku State University	Azerbaijan
39	592	Bogor Agricultural University	Indonesia
40	598	Cukurova University	Turkey
41	600	Diponegoro University	Indonesia
42	603	E.A.Buketov Karaganda State University	Kazakhstan
43	610	Jordan University of Science & Technology	Jordan
44	613	Kazakh National Pedagogical University Abai	Kazakhstan
45	614	Kazakh National Technical University named after K.I. Satpaev	Kazakhstan

47 48	616 619 620	Khazar University Kuwait University	Azerbaijan Kuwait
48		Kuwait University	Kuwait
	620		ixawait
		Lahore University of Management Sciences (LUMS)	Pakistan
49	631	Qafqaz University	Azerbaijan
50	634	Sepuluh Nopember Institute of Technology	Indonesia
51	636	Sharif University of Technology	Iran
52	637	South Kazakhstan State University (SKSU)	Kazakhstan
53	674	Universiti Teknologi MARA - UiTM	Malaysia
54	676	University of Baghdad	Iraq
55	677	University of Bahrain	Bahrain
56	680	University of Brawijaya	Indonesia
57	687	University of Dhaka	Bangladesh
58	688	University of Engineering & Technology (UET) Lahore	Pakistan
59	689	University of Jordan	Jordan
60	690	University of Karachi	Pakistan
61	691	University of Lahore	Pakistan
62	-	King Khalid University	Saudi Arabia
63	-	Cairo University	Egypt
64	-	KOC University	Turkey
65	-	Deponegoro University	Indonesia

Source: QS World University Rankings 2012

Table 5 MMCs in Academic Ranking of World Universities (China) 2012

Sl. No	Rank	University	Country
1	300-201	King Saud University	Saudi Arabia
2	400-301	King Abdulaziz University	Saudi Arabia
3	400-301	King Fahd University of Petroleum & Minerals	Saudi Arabia
4	400-301	University of Tehran	Iran
5	500-401	Cairo University	Egypt
6	500-401	Istanbul University	Turkey
7	500-401	University of Belgrade	Serbia
8	500-401	University of Malaya	Malaysia

Source: Academic Ranking of World Universities 2012

Subject-wise Ranking

SWR is an important tool to analyze more clearly the research performance and educational standard of different universities in different subject areas. Therefore it helps to attract interna-

tional students to a particular university. Mostly the institutions which prepare University Rankings also prepare Rankings by subjects.

MMCs in QS World University Rankings 2012-13 by Subjects

The table below shows the representation of MMCs in QSWUR by Subjects. The data of the table is extracted from the QSWUR by subject 2012-13 (QS World University Rankings by Subject, 2012). In the source table the top fifty Universities were mentioned individually with respect of their ranks in each subject. Afterwards each group of fifty universities was mentioned collectively. These groups are 51-100, 101-150 and 151-200.

In the table below the SWR of 29 subjects were mentioned. In the beginning of every subject first we have displayed the top rank holder of the subject afterwards the ranking of MMCs in that subject is mentioned in the decreasing order.

Table 6 QS MMCs in World University Rankings 2012-13 by Subjects with the Top Position Holder in each Subject

Subject	Institution	Rank	Country
Philosophy	University of Oxford	1	UK
	Bilkent University	150-101	Turkey
Modern Languages	Harvard University	1	USA
	King Saud University	150-101	Saudi Arabia
	American University of Cairo	200-151	Egypt
	Cairo University	200-151	Egypt
	Istanbul University	200-151	Turkey
	University of Indonesia	200-151	Indonesia
Geography	University of Oxford	1	UK
	Universiti Kebangsaan Malaysia (UKM)	150-101	Malaysia
	Universiti Malaya (UM)	150-101	Malaysia
History	University of Oxford	1	UK
Linguistics	Massachusetts Institute of Technology	1	USA
	Bogazici Universitesi	200-151	Turkey
English Language & Literature	University of Cambridge	1	UK
	King Saud University	150-101	Saudi Arabia
	Universiti Putra Malaysia (UPM)	150-101	Malaysia
	University of Indonesia	150-101	Indonesia
	Universiti Kebangsaan Malaysia (UKM)	200-151	Malaysia
	Universiti Malaya (UM)	200-151	Malaysia
Computer Science and Information System	Massachusetts Institute of Technology (MIT)	1	USA
	King Fahd University of Petroleum & Minerals	200-151	Saudi Arabia

Chemical Engineering	Massachusetts Institute of Technology (MIT)	1	United States
	Universiti Sains Malaysia (USM)	100-51	Malaysia
	King Fahd University of Petroleum & Minerals	150-101	Saudi Arabia
	Middle East Technical University	150-101	Turkey
	Universiti Malaya (UM)	150-101	Malaysia
	Universiti Teknologi Malaysia (UTM)	150-101	Malaysia
	Bogazici Universitesi	200-151	Turkey
	Istanbul Technical University	200-151	Turkey
	Universiti Kebangsaan Malaysia (UKM)	200-151	Malaysia
	Universiti Putra Malaysia (UPM)	200-151	Malaysia
Civil Engineering	Massachusetts Institute of Technology (MIT)	1	United States
	King Fahd University of Petroleum & Minerals	34	Saudi Arabia
	Middle East Technical University	100-51	Turkey
	American University of Beirut (AUB)	150-101	Lebanon
	Istanbul Technical University	150-101	Turkey
	Bogazici Universitesi	200-151	Turkey
	Cairo University	200-151	Egypt
	Sharif University of Technology	200-151	Iran
	United Arab Emirates University	200-151	United Arab Emirates
	Universiti Kebangsaan Malaysia (UKM)	200-151	Malaysia
	Universiti Putra Malaysia (UPM)	200-151	Malaysia
	University of Tehran	200-151	Iran
Electrical Engineering	Massachusetts Institute of Technology (MIT)	1	United States
	Istanbul Technical University	150-101	Turkey
	Middle East Technical University	150-101	Turkey
	Universiti Malaya (UM)	150-101	Malaysia
	Bogazici Universitesi	200-151	Turkey
Mechanical Engineering	Massachusetts Institute of Technology (MIT)	1	United States
	Istanbul Technical University	150-101	Turkey
	King Fahd University of Petroleum & Minerals	150-101	Saudi Arabia
	Middle East Technical University	150-101	Turkey
	Universiti Malaya (UM)	150-101	Malaysia
	Bilkent University	200-151	Turkey
	Bogazici Universitesi	200-151	Turkey
	Universiti Kebangsaan Malaysia (UKM)	200-151	Malaysia
	Universiti Putra Malaysia (UPM)	200-151	Malaysia
	Universiti Sains Malaysia (USM)	200-151	Malaysia
	Universiti Teknologi Malaysia (UTM)	200-151	Malaysia

Medicine	Harvard University	1	United States
Biological Sciences	Harvard University	1	United States
Psychology	Harvard University	1	United States
Pharmacy & Pharmacology	Harvard University	1	United States
	Universiti Kebangsaan Malaysia (UKM)	100-51	Malaysia
	Universiti Malaya (UM)	100-51	Malaysia
	Universiti Putra Malaysia (UPM)	200-151	Malaysia
	Universiti Sains Malaysia (USM)	200-151	Malaysia
Physics & Astronomy	Massachusetts Institute of Technology (MIT)	1	United State
	Bogazici Universitesi	200-151	Turkey
Mathematics	Massachusetts Institute of Technology (MIT)	1	United States
	King Fahd University of Petroleum & Minerals	100-51	Saudi Arabia
	Universiti Kebangsaan Malaysia (UKM)	200-151	Malaysia
Environmental Sciences	Stanford University	1	United States
	Universiti Sains Malaysia (USM)	29	Malaysia
	Universiti Teknologi Malaysia (UTM)	150-101	Malaysia
	University of Dhaka	150-101	Bangladesh
	Universiti Kebangsaan Malaysia (UKM)	200-151	Malaysia
	Universiti Malaya (UM)	200-151	Malaysia
Earth & Marine Sciences	Harvard University	1	United States
	Bandung Institute of Technology (ITB)	200-151	Indonesia
Chemistry	Massachusetts Institute of Technology (MIT)	1	United States
	Istanbul Technical University	200-151	Turkey
Material Science	Massachusetts Institute of Technology (MIT)	1	United States
	Istanbul Technical University	150-101	Turkey
Statistics & Operational Research	Stanford University	1	United States
	King Fahd University of Petroleum & Minerals	100-51	Saudi Arabia
	King Saud University	100-51	Saudi Arabia
	Middle East Technical University	150-101	Turkey
	Kuwait University	200-151	Kuwait
Sociology	Harvard University	1	United States
Politics & International Studies	Harvard University	1	United States
	American University in Cairo	150-101	Egypt
	Jawaharlal Nehru University	150-101	India
	Bilkent University	200-151	Turkey
Law	Harvard University	1	United States

continue Table 6

Economics & Econometrics	Massachusetts Institute of Technology (MIT)	1	United States
	Bilkent University	200-151	Turkey
Accounting & Finance	Harvard University	1	United States
Communication & Media Studies	Stanford University	1	United States
	Universiti Putra Malaysia (UPM)	100-51	Malaysia
	Istanbul University	150-101	Turkey
	Universiti Kebangsaan Malaysia (UKM)	150-101	Malaysia
	Cairo University	200-151	Egypt
	Multimedia University (MMU)	200-151	Malaysia
	University of Tehran	200-151	Iran
Education	Harvard University	1	United States
	Universiti Putra Malaysia (UPM)	150-101	Malaysia
	Universiti Sains Malaysia (USM)	150-101	Malaysia
	Middle East Technical University	200-151	Turkey

Source: QS World University Rankings 2012

The Table 6 shows the representation of MMCs in QSWUR 2012-13 by subject. The representation of MMCs in QSWUR by subject is also too undermining. Not a single university in the whole Islamic World remotely approaches the stature of European or American universities (Ather Naveed, 2012). Out of 29 subjects there is no representation of MMCs at all in six subjects. Those subjects are History, Medicine, Biological Sciences, Psychology and Law. In Philosophy, Linguistics, Computer Science and Information System, Physics & Astronomy, Earth & Marine Sciences, Material Science, Statistics & Operational Research, Economics & Econometrics only one University represents the whole Muslim world in each subject. Only two universities of MMCs acquired positions in top fifty universities of any subject. These are Universiti Sains Malaysia (USM) achieved 29th rank in Environmental Sciences and King Fahd University of Petroleum & Minerals ranked 34th in Civil Engineering. The remaining all MMC universities lie in below 50 categories. Overall Malaysia leads the MMC in the universities having 32 universities in the table followed by Turkey, Saudi Arabia and Iran having 24, 9 and 3 universities respectively. Pakistan which is an important MMC has no representation at all while Bangladesh, Kuwait and UAE have one representation each. Another subject wise ranking prepared by Times Higher Education, for six subjects and the ranking of 50 universities prepared in each subject (Top 50 arts and humanities universities, 2012-13). But not a single University of any MMC found in the whole list.

PhDs awarded by Country

PhDs produced by a Country is an important indicator which reflects the standard of higher of a Country. The list below shows the number PhDs produced by MMCs in comparison to some leading nations. The source of the list is the website of World Bank which is mentioned in the references. We have not found any other source which has latest data than this list so we have to depend on this list and mentioned it here. The list have three year data but not in the uni-

form manner. It should be noted that the names of the countries which were not mentioned in the list were also not mentioned in the source list. The largest number of PhDs produced by a Muslim country is Tunisia which produced 18, 63 Doctorates in 2008 however the data of 2009 and 2010 is not available in the source list. In 2010 Turkey produced 884 PhDs while in the same year China produced 48,987 (Anastasia Sharova 2013) PhDs and USA produced 48,069 PhDs (Anastasia Sharova 2013). It is noteworthy that according to official information published on the website of the Chinese Ministry of Education, the country aimed to award 125,153 doctorates in 2011(Anastasia Sharova 2013). However the data of 2011 and 2012 is not available to us. But it is obvious that MMCs are far behind in producing Doctorates than other leading countries both on quantitative and qualitative levels.

Table 7 Number of PhDs Produced by Country

Country	2008	2009	2010
Tunisia	1,863	-	-
Turkey	745	804	884
Iran, Islamic Rep.	751	-	-
Morocco	661	-	-
Egypt, Arab Rep.	438	420	-
Senegal	384	-	
West Bank and Gaza	95	144	325
Pakistan	-	162	-
Kuwait	158	152	-
Albania	147	-	-
Burkina Faso	-	-	45
Indonesia	-	90	-
Iraq	-	49	-
China	-	-	48,987
USA	-	-	48,069
Finland	7,689	7,647	7,722
Iceland	7,428	9,068	-
Denmark	6,494	6,527	6,365
Singapore	5,834	6,173	-
Sweden	5,437	5,046	5,257
Norway	5,352	5,435	5,434
Japan	5,189	5,180	-
Korea, Rep.	4,947	5,089	5,481
New Zealand	-	4,951	-
Luxembourg	4,699	4,816	4,998
Canada	4,470	-	-
Australia	4,294	-	-
Austria	4,137	4,142	4,282

continue Table 7

United Kingdom	4,112	4,154	3,794
Portugal	3,800	4,137	4,301
Germany	3,667	3,850	3,979
France	3,666	3,751	-
Slovenia	3,484	3,679	3,795
Belgium	3,469	3,586	3,563
Ireland	3,342	3,292	3,230
Switzerland	3,320	-	-
Russian Federation	3,152	3,091	3,092
Netherlands	3,074	2,836	3,134
Estonia	2,965	3,215	3,034
Spain	2,901	2,932	2,922
Czech Republic	2,870	2,755	2,785
Hong Kong SAR, China	2,664	2,759	-
Lithuania	2,517	2,541	2,523
Slovak Republic	2,313	2,438	2,780
Latvia	1,924	1,601	1,690
Tunisia	1,863	-	-
Hungary	1,846	2,006	2,138
Italy		1,690	1,748
Poland	1,617	1,598	1,685
Croatia	1,516	1,571	1,613
Bulgaria	1,500	1,587	1,459
Ukraine	1,433	1,353	-
Malta	1,307	1,190	1,412
China	1,199	863	-
Argentina	1,046	1,091	-
Serbia	1,014	1,060	-
Romania	898	895	921
Moldova	807	794	-
Iran, Islamic Rep.	751	-	-
Cyprus	748	801	811
Turkey	745	804	884
Macao SAR, China	672	734	-
Morocco	661	-	-
Brazil	629	668	704
Puerto Rico	-	668	-
Macedonia, FYR	472	-	-

continue Table 7

Egypt, Arab Rep.	438	420	-
South Africa	393	-	-
Senegal	384	-	-
Chile	355	-	-
Uruguay	346	520	-
Mexico	340	384	-
Costa Rica	257	334	-
Venezuela, RB	188	183	-
Colombia	180	161	-
Kuwait	158	152	-
Albania	147	-	-
Panama	111	114	117
Ecuador	106	-	-
Sri Lanka	96	-	-
Bolivia	-	145	-
Paraguay	75	-	-
Madagascar	48	46	-
Ethiopia	-	-	45
Zambia	43	-	-
Guatemala	39	39	-
Lesotho	-	21	-
Rwanda	10	12	-

Source: UNESCO, 2013

Observatories and Planetariums by Country

Telescopes are important tools of Modern educations and reflect the standard of education of a University. Mostly every eminent University in the West has its own Observatory, Planetarium and Telescope. But in Muslim Majority Countries they are hardly found except few. In the list below we are presenting the number of Observatories and Planetariums by Country. The findings of the list are quite amazing. There are 20 Observatories and 49 Planetariums found in all MMCs together while USA alone has 336 Observatories and 906 Planetariums even the New York city has 20 Observatories and 6 Planetariums. It implies that New York City of USA has equal number of observatories to what the whole 'Islamic World' has. Moreover the observatories which are found in MMCs are only Ground Based observatories which are relatively economical and have limited observation ranges as compare to other modern telescopes. But unfortunately MMCs have no such types of telescopes except Kazakhstan which have a cosmic ray observatory. In the second list below we have presented different types of Modern Telescopes and mentioned that which Telescopes are found in which Country including MMCs.

Table 8 Observatories and Planetariums by Country

Country	No of Observatories	No of Planetariums
Turkey	9	11
Pakistan	4	3
Uzbekistan	2	1
Lebanon	1	No
Algeria	1(defunct)	No
Azerbaijan	1	1
Indonesia	1	3
Iran	1(defunct)	4
UAE	No	6
Malaysia	2	5
Kazakhstan	No	3
Kuwait	No	3
Saudi Arabia	No	2
Bangladesh	No	2
Jordan	No	1
Oman	No	1
Qatar	No	1
Tajikistan	No	1
Egypt	No	1
Total	20	49
USA	336	906
UK	35	26
New York	20	4

Source: en.wikipedia.org 2, 2013

Types of Observatories

Astronomical observatories are mainly divided into four categories: space based, airborne, ground based and underground based. Many modern telescopes and observatories are located in space to observe astronomical objects in wavelengths of the electromagnetic spectrum that cannot penetrate the Earth's atmosphere (such as ultraviolet radiation, X-rays, and gamma rays) and are thus impossible to observe using ground-based telescopes. Being above the atmosphere, these space observatories can also avoid the effects of atmospheric turbulence that plague ground based telescopes; although new generations of adaptive optics telescopes have since then dramatically improve the situation on the ground. The space high vacuum environment also allow to free the detectors from the ancestral diurnal cycle due to the atmospheric blue light background of the sky, therefore increasing significantly the observation time.

The purpose of this list is to show how many types of telescopes are there and how many types the MMCs have. There are several types of telescopes but here we only mentioned major 11

types of telescopes namely, Space observatory, Gravitational-wave detector, Resonant bars, Antimatter observatory, Airborne observatory, Radio observatory, Microwave observatory, Solar observatory, Neutrino detector, Cosmic-ray observatory and Ground-based observatory. Among these observatories ground based observatories are very common and relatively affordable. The table reflects that only seven MMCs have ground based observatories. MMCs have no other type of observatory at all, except Kazakhstan which have a Cosmic-ray observatory. In modern times space telescopes are most important tools to observe space clearly but till today no MMC have a space telescope yet. The countries which have space telescopes of their own are, USA, European Union, China, Japan, UK, Germany, France, Russia, Italy, Canada, India, South Korea and Netherlands.

Muslim Noble Laureates

Till today, 14 million Jews have won 180 Nobel prizes whilst 1.5 billion Muslims have achieved only 3 Nobel prizes.

Conclusion

The literary and developmental conditions of all MMCs are too undermining. In every aspect of development the performance of MMCs is substandard weather it is Literacy, Economy, Science and Technology and Sports etc. Since Education is a cornerstone of any development, the foundation on which much of economic and social well being is built. It is a key to increasing economic productivity and social cohesion. By increasing the value and efficiency of their labor, it helps to raise the poor from poverty; by increasing the overall productivity and intellectual flexibility of the populace, it helps to ensure that a country is competitive in world markets characterized by changing technologies and production methods; by increasing a child's integration with disparate social or ethnic groups early in life, it contributes significantly to nation building and interpersonal tolerance (Human Development Network, 2013). Today Muslims are the second majority of the world and ruling over 49 countries. The community that owns more than 80% oil reserves, but unfortunately far behind in educational sector. Total number of Universities in USA is 2138 and in Brazil has 1844, Philippines has 1321 Universities whereas MMCs have 2313 Universities altogether. Literacy in the Christian World 90% while, the literacy in the Muslim World 40% (islamoscope, 2008).

Since World University Ranking is a top window to observe the educational standard of a particular nation but the representation of the Universities situated in MMCs is not too satisfactory. Both 'Overall Ranking' and 'Ranking by Subjects' show the alarming conditions of University Education in MMCs. At the outset, out of 51 MMCs only 61 universities represented in the QSWUR of 700 universities. In overall ranking of QSWUR there is no representation of MMCs at all up to 155th rank. It is the Universiti Malaya (UM) which is able to achieve 156th position in the list. In the 'Ranking of World Universities' prepared by a Chinese institution there is no University of any MMC in top 200 category and in 201-500 group only eight Universities of MMCs be able to get positions. In SWR of QSWUR, the columns of six subjects are about blank with the names of MMC universities. And in another eight subjects only one university of MMCs found in each subject. It is a time to think keenly that what are the factors responsible for this poor representation are and how it could be coped. Though in the recent years Universities of MMCs marked a slight enhancement their educational standards in comparison to previous years. In the above Table 1.6 the University is showing gradual increment 156th rank from 167th rank of last year. Similarly King Saud University is showing gradual increment

Table 9 Types of Observatories

Countries	Space observatory	Gravitational- wave detector	Resonant bars	Antimatter observatory	Airborne observatory	Radio observatory	Microwave observatory	Solar observatory	Neutrino detector	Cosmic-ray observatory	Ground-based observatory
Turkey	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	>
Malaysia	ı	UC	ı	ı	ı	ı	ı	ı	1	ı	>
Kazakhstan	ı	ı	ı	ı	ı	ı	ı	•	1	>	>
Iran	ı	ı	ı	ı	ı	ı		ı	1	1	>
Uzbekistan	ı	ı	I	ı	ı	ı	1	ı	1	1	>
Azerbaijan	ı	ı	ı	ı	1	ı	1	ı	ı	1	>
Morocco	ı	ı	ı	ı	ı	ı	1	ı	1	ı	>
USA	>	>	>	>	>	>	>	>	>	>	>
EU	>	ı	ı	ı	1	ı	1	>	1	1	ı
China	>	>	>	ı	ı	>	ı	>	1	ı	>
Japan	>	>	>	>	ı	ı	ı	>	>	>	>
UK	>	>	ı	ı	ı	>	ı	•	1	ı	>
Germany	>	>	>	ı	>	>	1	>	1	1	>
France	>	>	I	ı	ı	>	1	>	1	1	>
Russia	>	nc	ı	1	1	ı	1	ı	>	>	>
Italy	>	>	>	ı	ı	ı	ı	ı	ı	ı	>

continue Table 9

Namibia	ı	ı	ı								>
Finland	ı	ı	ı								>
Armenia	ı	ı	ı								>
Switzerland	ı	ı	>								>
Canada	>	ı	ı								>
Chile	ı	ı	ı								>
India	>	ı	ı								>
South Africa	ı	ı	ı								>
Finland	ı	ı	ı								>
Australia	ı	UC	>								>
Sweden	ı	ı	ı								>
Spain	1	ı	ı								>
South Korea	>	ı	ı								>
Mexico	ı	ı	ı								>
Austria	1	ı	ı								>
Netherlands	>	ı	1	1	ı	ı	ı	ı	ı	ı	>

Source: List of astronomical observatories

in its position from 2009 to 2012. In 2009 it was ranked on 247th in 2009 and jumped up to 221st rank in 2010 then to 200th rank in 2011 and finally achieved 197th rank in 2012. In the same way some other universities of Saudi Arabia shows a gradual enhancement since last four or five years. For instance Qatar is a hub to Education, a development zone that houses local branches of Cornell, Carnegie Mellon, Georgetown, HEC, Texas A+M and other US and European universities. Qatar is also committed to spending 2.8 per cent of GDP on research in 2011, probably the highest figure in the world. As Martin Ince Marked, "*They may be at an early stage in their development, but investment schemes of Middle Eastern nations are beginning to pay dividends*" (Martin Ince, 2011). But these all meager improvements do not indicate a very big change in the standards of University Education in these nations.

So Muslims have to put especial emphasis on Education and also should increase the educational expenditure particularly on primary education. According to a source Pakistan has seven million children who do not go to schools, including 2.3 million between the ages of five to nine. As Ghafoor (a taxi driver) tells his story,

I've had to pull my eldest child out of school because I can't afford it. He cries every day, says he wants to go to school. I tell him we can either eat or he can go to school, and he says he'd rather starve," said Ghafoor. "How do I make him understand? How do I make this right?

irinnews.org, 2012

In Western world 98% people complete their primary education and 40% goes to universities, whereas in Muslim world only 50% people completes primary education and 2% goes to universities (islamoscope, 2008). In UK, 2000 books are published for every one million people, whereas in Egypt, the number is only 20 (islamoscope, 2008). Educational level of the common Arabs is also too low. As of 1982, Arab world produced 40 books per million habitants which is far below the world average 162 titles per million, (Dale and Piscatori, 1997, p 36). Another report reveals; the Arab world translates about 330 books annually, one-fifth of the number that Greeks translate every year (islamoscope, 2008). As per United Nations 'Arab Human Development Report' (Gattuso, Thierry, 2005), half of Arab women are illiterate. In total, 60% of Arab Muslims are illiterate. Almost half of the universities concentrate on teaching Islamic education and Islamic science. Fifteen percent of the Arab workforce is unemployed. Only 1% of the Arab population has a personal computer, and only 0.5 % uses the Internet. These all facts indicate the lack of education in Muslims (Gattuso Thierry, 2005).

In Higher education the increase investment is also required. Particularly in Modern Science and Technology the conditions of Muslims are very undermining. For instance Iran is the alone MMC having an Aircraft Engine Manufacturing Firm in any MMC so far. Yuri Alekseyevich Gagarin of USSR was the first human to journey into outer space, when his Vostok spacecraft completed an orbit of the Earth on 12 April 1961 and in 1969 Neil Armstrong was the first human to step on the Moon, but even after 52 years no MMC has its own spacecraft so far. Furthermore No MMC has so far its own Computer Manufacturing Industry, Aircraft engine Manufacturing Industry, Aircraft Carrier and Nuclear Submarine etc. MMCs have a long way to go for achieving global standards of Education and Economic development on both Quantitative and Qualitative levels and therefore due for a big push.

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ATTACHMENT 1

Table 1 Acronyms

WUR	World University Ranking
WURS	World University Ranking by Subjects
QSWUR	Quacquarelli Symonds World University Ranking
ARWU	Academic Ranking of World Universities
MMCs	Muslim Majority Countries
CMCs	Christian Majority Counties
BMCs	Buddhist Majority Counties
НМС	Hindu Majority Country
JMC	Jews Majority Country
SWR	Subject-wise Ranking
CIAWFC	CIA World Fact Book

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