©The Pakistan Development Review
48 : 4 Part II (Winter 2009) pp. 739–754

Poverty Elimination Through Potential Zakat Collection in the OIC-member Countries: Revisited

NASIM SHAH SHIRAZI and MD. FOUAD BIN AMIN

1. INTRODUCTION

The World Bank has been reporting poverty estimates for a number of years which are helpful in assessing the progress towards poverty alleviation across the countries. The World Bank (2009) estimates show that poverty level has been decreasing over last two and half decades. The number of absolute poor (in terms of $1.25 a day) has decreased from about 1.9 billion in 1981 to about 1.8 billion in 1990, and it further dropped to about 1.4 billion in 2005. The share of people living on less than $ 1.25 a day decreased by 10 percentage points from 52.2 to 42.0 percent during 1981 to 1990 and it further went down by about 17 percentage point (from 42.0 percent to 25.3 percent) during 1990 and 2005. Similarly, we can find variations on the poverty alleviation front across the regions. East Asia and pacific, Middle East and North Africa witnessed a decline in poverty both in terms of number of absolute poor and the share of people in poverty during 1981 to 2005. Although the share of South Asia's poor people in Global poverty declined from 59.4 percent to 40.3 percent during 1981 to 2005, yet absolute number of poor people increased from 548 million to 596 million during the same period. Sub-Sahara Africa witnessed a slight decreased (53.4 percent to 50.9 percent) in its share of poor people, while the number of poor people increased from 211 million to 388 million during 1981 to 2005. This shows that poverty has been the serious problem and a great challenge for Developing Countries. In Europe and central Asia, both the number of poor people and the share of people in poverty increased during the same period. [See World Bank (2009), Table 2.8]. The World Bank believe that about 46 million more people will come under the income level of $1.25 a day due to the recent global economic meltdown and the slow economic growth rates.

Different policies and strategies, both at the micro and macro level including safety-nets programmes, have been adopted in different countries in the past to reduce the poverty, but the fact remains that poverty still persists especially in developing countries. The Muslim countries have a very strong institution—*Zakat and Sadaqat*—which has never been practiced in its true spirit. We firmly believe that if this institution is revived and fully implemented then absolute poverty can be eliminated from these countries.

Nasim Shah Shirazi <nasimss@yahoo.com> is Professor, and Md. Fouad Bin Amin is PhD Student, Department of Economics, Faculty of Economics and Management Sciences, International Islamic University Malaysia (IIUM).

This paper is written in the said spirit. The paper attempts to estimate resource shortfall and potential *Zakat* collection for poverty elimination in 38 OIC-member countries.[1] The rest of the paper is organised as follows. Section 2 gives a brief summary of the literature review and Section 3 discusses the data and methodology employed for the estimation of results. Section 4 highlights the poverty incidence in the OIC member countries from which data are available, Section 5 provides the estimates of resource required for poverty elimination, the estimates of potential *Zakat* collection and compares both the resource required and resource needed that can be made available through potential *Zakat* collection. Section 6 sets forth the summary and conclusion.

2. LITERATURE REVIEW

An extensive review of literature has been covered by [Shirazi (2004, 2006)]. However, this section focuses on a few studies only, which discuss the subject matter of the paper. Ahmed (2004) estimates the potential of Zakat collection and resource required for poverty alleviation for a sample of 24 IDB member countries by using a $1/day (group1) and $2/day (group 2) international poverty lines. To determine the amount needed per annum for poverty alleviation, the author multiplied the number of poor of each country under his study by 365 and converted the amount into percentage of GDP of the respective country. Similarly he estimated the resource required under $2.00 a day. He found that , at one extreme, Tunisia required only 0.3 percent (for group 1) and 1.4 percent (for group 2) of its GDP for the alleviation of extreme poverty while at other extreme, Nigeria required huge amount that is 107.7 percent (for group1) and 149.6 percent (for group 2) of GDP respectively for poverty alleviation. The author employed Kahf (1989) estimates to measure the potential of Zakat in the respective countries. Author compares the percentages of GDP required under $1 and $2 for poverty alleviation with potential Zakat collection under three different opinions for Zakatable items. With the Zakat rate of 1.8 percent, only eight countries namely Tunisia, Turkey, Kazakhstan, Jordan, Algeria, Morocco, Egypt and Azerbaijan are capable of lifting the poor from poverty line in a year (group 1), but other 16 countries are failing to do so. At 4.3 percent Zakat rate half of the sample countries are able to move their hard core poor people (Group 1) out of poverty [for further detail see Ahmad (2004)].

In our view, study has two shortcomings. Firstly, study multiplies the total number of poor of the respective country by 365 to estimates total funds needed per annum for poverty alleviation. Thus the study assumes that every poor has zero income. This may not be true. Some may be having zero income while other more than zero but less than $1 a day. Therefore, precise estimates for obtaining absolute resource required can be obtained by using the poverty gap index. Secondly, the author has not adjusted the Muslim and non-Muslim population for the estimation of potential Zakat.

Yaumidin (2009) estimates the resource needed for poverty alleviation and potential Zakat collection for Malaysia and Indonesia. She concludes that Malaysia performs better than Indonesia. She replicates the methodology employed by Ahmad (2004) which suffers the same shortcoming as discussed above.

[1] Data are available for 38 OIC-member countries only.

Although macroeconomic policies play pivotal role in alleviating poverty, yet it cannot be eliminated without the use of Zakat in an effective way [Ahmad (2008)]. Ahmad is of the view that Zakat can make an impact on poverty if (i) it is complemented by robust macroeconomic policies that increase growth and redistribute income, and (ii) when larger portion of Zakat is used for productive purposes.

Hassan and Khan (2007) find that Zakat fund can largely facilitate the government budgetary expenditure and support the poor through transfer of payment in Bangladesh. By allocating funds into eight groups of Zakat recipient, it is possible to increase the income and employment with the improvement of safety net programmes. Zakat funds can increase the tax potential of the government through the improvement of productivity, employment and output. They conclude that Zakat funds can replace the government budgetary expenditures ranging from 21 percent of ADP (annual development me) in 1983-84 to 43 percent of ADP in 2004-2005. These funds can be used for other developmental and social expenditures. They suggested that Zakat should be included, for Bangladesh and rest of the Muslim countries, as a poverty alleviation instrument in their PRSP.

Sadeq (1996) finds that RM 293 million (which is about 73 percent of estimated potential Zakat collection) will be needed annually to change the status of hard-core households to a status of non-poor households in Malaysia. The rest of the amount (23 percent), as the study suggests, could be used for uplifting their economic condition.

While discussing the distributive effect of Zakat, Awad (1989) estimates that in Sudan about 3 to 4 percent of GNP is collected as Zakat revenue which implies that one third of GNP can be redistributed form the rich to the poor in a decade. However, some studies find that the proceeds of Zakat will not exceed 1 to 2 percent of GNP, when all the existing Fiche rules are followed, especially in Sudan and Saudi Arabia [Khan (1989) and Salama (1990)].

The studies made, so far, are either limited in scope or lack the proper methodology for estimation of the resource needed and potential Zakat collection. Therefore the present study is devoted for the purpose.

3. METHODOLOGY AND DATA SET

As we have noted earlier that this paper is the updated and extended version of Shirazi (2004, 2006), so we have followed the same estimation method for the current paper. However, we have corrected the error which we made in our earlier paper, which resulted under estimation of the resource required for poverty elimination.

3.1. Estimation of Resource Shortfall

The resource gap has been estimated by using the poverty gap index, which is defined as the mean shortfall below the poverty line, expressed as a percentage of the poverty line. The World Bank has used the recent updated poverty lines of US $1.25 a day in 2005 PPP terms for hard core poor and US $2.0 a day for the poor respectively which represents the mean of poverty lines found in the poorest countries ranked by per capita consumption.[2] This reflects the depth of poverty as well as its incidence. The

[2]For precise estimates, national poverty lines and micro data of each country are required, which are not available to us. Therefore we have to rely on the International poverty line and the poverty gap index measured in terms of international poverty line. The World Bank has updated the previous international poverty line which was in terms of $ 1 a day for the extreme poor and $ 2 a day for the relative poor. However, this poverty line remained controversial among the researchers [see Pogge and Reddy (2003)]. The recent updated poverty lines in terms of $1.25 a day and $2.0 a day is also questioned by the same author [see Reddy (2009)].

poverty gap index does not provide the total income (consumption) shortfall explicitly. For this purpose we will use the estimated poverty gap based on international poverty line, and convert it into absolute figures for each country under study.

$P_1 = 1/N \sum_{i=1}^{q} (Z - \frac{Yi}{z})$, Where, N is total population, Z is poverty line and Yi is the income (consumption) of the ith household. The poverty gap index has been rearranged to get the absolute resource shortfall of the country concerned.

$$\sum_{i=1}^{q} (Z - Yi) = P_1 NZ$$

Similarly average resource shortfall under $2 a day is calculated. This will give us, on average, the total amount required for poverty elimination for each country under study.

3.2. Estimation of Potential Zakat Collection

Different studies have been made for the estimation of potential Zakat collection in the past. All such studies have used different methodology and employed diverse opinions of scholars regarding the coverage of Zakat and consequently their results are not comparable [see Salama (1982); Chowdhry (1991); Kahf (1989, 1999); Hussain and Shirazi (1994); al-Tahir (1997)].[3] Since there is no agreement among the scholars on the new wealth that may be brought under Zakat net, hence there is urgent need for the general agreement on the definition of the items, which may be taken as Zakatable items. This requires *Ijmah* of the *ullama* and other contemporary scholars on the issue.

Kahf (1989) estimated Zakat potential for eight Muslim countries by using National Income Accounts. His estimates of potential Zakat were based on three different opinions of jurists regarding Zakatable items. Those three definitions were named as Z1, Z2 and Z3. Z1 was estimated in accordance with the majority traditional view according to which Zakat was levied on agriculture, livestock, stock in trade, gold, silver and money. Z2 was based in accordance with the views of contemporary Muslim scholars where Zakat can be deducted from net returns of manufacturing concerns and building rents and from net savings out of salaries. Z3 was based on Malikite views, where Zakat base includes buildings and other fixed assets except those assigned for personal and family use. According to these definitions, under Z1, Zakat can be collected in the range of 1.0 percent to 2.0 percent, under Z2 from 3.1 percent to 4.9 percent and under Z3 from 3.2 percent to 7.5 percent of the GDP for the eight Muslim countries (for detail see Table 1).

Table 1

Percentage of Estimated Zakat Proceeds to GDP in Selected Muslim Countries

Countries	Z1	Z2	Z3
Egypt	2.0	3.9	4.9
Indonesia	1.0	1.7	2.0
Pakistan	1.6	3.5	4.4
Qatar	0.9	3.7	3.2
Saudi Arabia	1.2	3.7	3.4
Sudan	4.3	6.3	6.2
Syria	1.5	3.1	3.1
Turkey	1.9	4.9	7.5
Average	1.80	3.85	4.34

Source: Kahf (1989).

[3] For detail see Shirazi (2006).

The different potential Zakat collection is due to different economic structure of the countries. Kahf's (1989) estimates covered eight Muslim countries having different economic structure, therefore, we have opted his definitions for potential Zakat estimation with some changes.

It may be noted that Zakat is collected from the rich Muslims only and non-Muslims[4] citizens are exempt from the payment of Zakat. Kahf's study for the above-mentioned eight countries, perhaps, did not take into account this factor while estimating Zakat potential under different definitions of Zakatable items. Consequently, we have adjusted GDP of each Muslim country by taking into account the proportion of Muslim Population in each of the Muslim country. We have used the per capita concept of GDP for the adjustment of GDP. For example, GDP of Bangladesh was US$ 163,728 million (at PPP) in 2005, and the Muslim population was 88 percent, therefore, adjusted GDP for the purpose of Zakat estimation will be [(163,728)*(0.88)] US$ 144081million. Similarly, we have adjusted the GDP of all other countries with respect to their proportion of Muslim population. After adjusting GDP, we have used the Kahf's definition of potential Zakat collection for Egypt, Pakistan and Turkey as reported in the above Table 1. On the other hand, for the rest of the Islamic countries, where such estimates are not available, we have taken the average of Zs of the above eight countries (see Table 1) and used this average to estimate the potential Zakat collection.

3.3. Data Sets

We have used Poverty gap index under US $ 1.25 a day and US $ 2.0 a day as reported in World Bank (2009). Total Number of Population is taken from World Development Indicators (2007), while GDP (at PPP) from 2005-2007 are taken from the CIA World Fact books[5] and Development Data Group, the World Bank. 2008. 2008 World Development Indicators Online.[6]

4. POVERTY INCIDENCE IN MUSLIM COUNTRIES

This section gives an overview of poverty condition in OIC-member states. The poverty in the majority of the OIC-member countries are sever and housing more than 50 percent of their population as extremely poor. Among these countries are Burkina Faso (56.5 percent), Chad (61.9 percent), Guinea (70.1 percent), Mali (51.4 percent), Mozambique (74.7 percent), Niger (65.9 percent), Nigeria (64.4 percent), Sierra Leone (53.4 percent), and Uganda (51.5 percent). The incidence of poverty in Bangladesh (49.6

[4]Although non-Muslims are exempt from the payment of zakat but controversy still exists regarding the payment of zakat to the poor non-Muslims. Maududi (1988, pp. 63-64), wrote that non-Muslims should be helped from other social welfare funds as they are not eligible for taking zakat. His views were based on Hadith "…To be taken from your rich people (Muslims) and to be distributed to your poor people". Shaikh (1980) was of the view that zakat money may be paid to non-Muslims after meeting the need of the Muslims. He said that there is nothing-pertinent indication in the Qur'an or Hadith that zakat is to be used for Muslims only. Abu Saud (1988) expressed the same view. He further reported that zakat could be paid to non-Muslims as long they do not fight against Islam and Muslims. However, non-Muslims are not excluded from the poor people of the countries under study.

[5]Available at (http://www.nationmaster.com/graph/eco_gdp_pur_pow_par-economy-gdp-purchasing-power-parity) Economy Statistics > GDP (purchasing power parity) (most recent) by country.

[6]GDP, PPP, current international dollars, : http://earthtrends.wri.org/text/economics-business/variable-222.html

percent), Benin (47.3 percent), Comoros (46.1 percent), guinea-Bissau (48.8 percent) and Uzbekistan (46.3 percent) is also very high.

The World Bank (2009) report overestimates the percentage of poor population (under $1.25 a day) in case of Benin, Burkina Faso, Guinea-Bissau and Uganda compared to their national poverty lines. In contrast, countries like Albania, Azerbaijan, Egypt, Iran, Jordan, and Malaysia have the lowest rate of poverty (less than 2 percent of their total population) while Kazakhstan, Morocco, Tunisia, Turkey and Gabon also having less than 5 percent of their total population as poor. Interestingly, the report underestimates the percentage of poverty in case of all these countries compared with their national poverty line, which indicates the real picture of poverty in the respective countries. However incidence of poverty reported in the countries like Bangladesh, Mozambique, Niger, Nigeria and Togo is approximately comparable under both the national and international poverty lines. Under international poverty line of US $ 2 a day the incidence of poverty, in most of the countries, is found to be more than 70 percent of their total population (for detail see Appendix Table 1).

Since the international poverty measurements provide a uniform standard for comparing poverty rates and the number of people in poverty across countries, therefore results based on national and international poverty lines cannot be compared. However, as we have noted elsewhere, for precise measure micro data of each country is required.

5. RESULTS

In this section we have reported the estimates of resource required and potential Zakat collection for poverty elimination in the OIC member countries.

5.1. Resource Shortfall for Poverty Elimination

The column 7 and column 8 of the Table 2 depicts the resource required for poverty elimination under US $1.25 a day and US $ 2.0 a day respectively. Fifteen countries of the sample including Albania (0.03 percent), Algeria (0.16 percent), Azerbaijan (0.04 percent), Gabon (0.03 percent), Egypt (0.04 percent), Guyana (0.66 percent), Iran (0.02 percent), Jordan (0.04 percent), Kazakhstan (0.03 percent) Malaysia (0.02 percent), Morocco (0.06 percent), Suriname (0.54 percent), Tunisia (0.04 percent), Turkey (0.05 percent) and Yemen (0.88 percent) require small amount of resources for poverty elimination. These countries constitute about 37 percent of a total of 38 OIC-member countries that need less than 1 percent of their GDP per annum for reducing poverty. For some countries the resource requirement for poverty elimination ranges from 1 percent to about 3 percent of their GDP. This group of countries consists of Cameroon (2.69 percent), Cote d'Ivoire (2.01 percent), Djibouti (1.48 percent), Mauritania (1.84 percent), Pakistan (1 percent), Senegal (3.20 percent), and Tajikistan (1.55 percent). Resources shortfall for some countries is quite high. These countries are Mozambique (29.81 percent), Niger (21.29 percent), Sierra Leone (19.03 percent), and Guinea-Bissau (17.26 percent).

Column 8 of the Table 2 presents the resource shortfall under US $2. The resource short fall as a percentage of GDP is very high in the case of Guinea-Bissau (58.24 percent), Mozambique (72.09 percent), Niger (56.49 percent), Sierra Leone (56.26 percent), Chad (35.06 percent), Guinea (36.46 percent) and Uganda (31.35 percent). The total resource shortfall for all the sample countries under US $ 1.25 a day and US $ 2.0 a day is estimated to be 1.53 percent and 5.20 percent respectively of their total GDP.

Table 2

Resource Shortfall for Poverty Elimination under US $1.25& US $ 2 Poverty Lines

1	2	3	4	5	6	7	8
OIC- Member Countries	Survey Year	Total Population	GDP (PPP) Millions	Resource Shortfall under $ 1.25 per Annum (Million)	Resource Shortfall under $ 2 per Annum (Million)	Resource Shortfall under $ 1.25 per Annum as % of GDP	Resource Shortfall under $ 2 per Annum as % of GDP
Albania	2005	3153731	17,234	5.76	32.23	0.03	0.19
Algeria	1995	28265291	109,616	180.54	1320.55	0.16	1.20
Azerbaijan	2005	8391850	38,389	15.32	30.63	0.04	0.08
Bangladesh	2005	153281120	163,728	9161.42	37820.58	5.60	23.10
Benin	2003	7961594	9,163	570.30	1947.01	6.22	21.25
Burkina Faso	2003	13081911	12,450	1211.63	3743.52	9.73	30.07
Cameroon	2001	16240110	28,129	755.77	2797.85	2.69	9.95
Chad	2002	9118887	8,335	1065.09	2922.33	12.78	35.06
Comoros	2004	587944	630	55.80	146.79	8.86	23.30
Cote d'Ivoire	2002	17691452	27,333	548.88	2273.00	2.01	8.32
Djibouti	2002	762775	1,244	18.44	81.30	1.48	6.54
Egypt	2004	71550018	309,733	130.58	1828.10	0.04	0.59
Gabon	2005	1290693	17,839	5.30	47.11	0.03	0.26
Gambia	2003	1524061	1,491	84.14	277.03	5.64	18.58
Guinea	2002	8513599	8,556	1250.75	3119.89	14.62	36.46
Guinea-Bissau	2002	1455881	635	109.60	369.85	17.26	58.24
Guyana	1998	736291	1,977	13.10	37.09	0.66	1.88
Iran	2005	69087070	643,503	126.08	907.80	0.02	0.14
Jordan	2006	5537600	25,628	10.11	24.25	0.04	0.09
Kazakhstan	2003	14909000	103,441	27.21	424.46	0.03	0.41
Malaysia	2004	25191441	276,939	45.97	257.46	0.02	0.09
Mali	2006	11968376	12,664	1026.59	3188.97	8.11	25.18
Mauritania	2000	2566152	3,634	66.74	297.85	1.84	8.20
Morocco	2007	30860595	125,392	70.40	698.38	0.06	0.56
Mozambique	2002	19134153	10,366	3090.40	7472.84	29.81	72.09
Niger	2005	13264190	7,988	1700.55	4512.21	21.29	56.49
Nigeria	2003	134659379	178,435	18185.75	46103.33	10.19	25.84
Pakistan	2004	152061263	306,752	3052.63	20757.88	1.00	6.77
Senegal	2005	11770340	18,133	579.98	2113.72	3.20	11.66
Sierra Leone	2002	4924199	2,396	456.07	1348.00	19.03	56.26
Suriname	1999	432413	2,159	11.64	36.93	0.54	1.71
Tajikistan	2004	6467377	9,682	150.49	793.16	1.55	8.19
Togo	2006	6410428	4,971	333.42	1305.61	6.71	26.26
Tunisia	2000	9563500	45,617	17.45	209.44	0.04	0.46
Turkey	2005	72065000	561,075	295.92	1367.79	0.05	0.24
Uganda	2005	28947181	24,534	2522.57	7691.84	10.28	31.35
Uzbekistan	2003	25567700	43,028	1749.79	6196.59	4.07	14.40
Yemen	2005	21095679	46,150	404.25	2279.18	0.88	4.94
For all Countries		101009024	3208969	49106.43	166782.55	1.53	5.20

Source:

1. Total Number of Population is taken from WDI, 2007, Online Database, 2007 The World Bank Group,
2. GDP (at PPP) from 2005-2007 are taken from the web. (http://www.nationmaster.com/graph/eco_gdp_pur_pow_par-economy-gdp-purchasing-power-parity) Economy Statistics > GDP (purchasing power parity) (most recent) by country.
3. GDP, PPP, current international dollars, Web: http://earthtrends.wri.org/text/economics-business/variable-222.html.
4. All the web pages accessed on 20-08-09 to 29-09-2009.

5.2. Potential Zakat Collection

The Table 3 presents the potential amount of Zakat that can be collected under three different opinions of scholars regarding the items and assets that can be brought under Zakat net. Column 4 of the Table shows Muslim population in the respective country, which is used for the calculation of column 5 of the Table. Potential Zakat collection in absolute terms is reported in columns 6 through 8, while columns 9 through 11 depict potential Zakat collection as percentage of GDP for the respective country. On

Table 3

Potential Zakat Collection

1	2	3	4	5	6	7	8	9	10	11
OIC- Member Countries	Survey Year	GDP (PPP) Millions	Muslim Popu[n] (%)	Adjusted GDP (PPP) in Million USD	Z1 (Million USD)	Z2 (Million USD)	Z3 (Million USD)	Z1 (% of GDP)	Z2 (% of GDP)	Z3 (% of GDP)
Albania	2005	17,234	58	9995.72	179.92	384.84	433.81	1.04	2.23	2.52
Algeria	1995	109,616	99	108519.84	1953.36	4178.01	4709.76	1.78	3.81	4.30
Azerbaijan	2005	38,389	93.4	35855.33	645.40	1380.43	1556.12	1.68	3.60	4.05
Bangladesh	2005	163,728	88	144080.64	2593.45	5547.10	6253.10	1.58	3.39	3.82
Benin	2003	9,163	20	1832.60	32.99	70.56	79.53	0.36	0.77	0.87
Burkina Faso	2003	12,450	52	6474.00	116.53	249.25	280.97	0.94	2.00	2.26
Cameroon	2001	28,129	20	5625.80	101.26	216.59	244.16	0.36	0.77	0.87
Chad	2002	8,335	54	4500.90	81.02	173.28	195.34	0.97	2.08	2.34
Comoros	2004	630	99	623.70	11.23	24.01	27.07	1.78	3.81	4.30
Cote d'Ivoire	2002	27,333	38.6	10550.54	189.91	406.20	457.89	0.69	1.49	1.68
Djibouti	2002	1,244	99	1231.56	22.17	47.42	53.45	1.78	3.81	4.30
Egypt	2004	309,733	90	278759.70	5575.19	10871.63	13659.23	1.80	3.51	4.41
Gabon	2005	17,839	1	178.39	3.21	6.87	7.74	0.02	0.04	0.04
Gambia	2003	1,491	95	1416.45	25.50	54.53	61.47	1.71	3.66	4.12
Guinea	2002	8,556	85	7272.60	130.91	280.00	315.63	1.53	3.27	3.69
Guinea-Bissau	2002	635	38	241.30	4.34	9.29	10.47	0.68	1.46	1.65
Guyana	1998	1,977	10	197.70	3.56	7.61	8.58	0.18	0.39	0.43
Iran	2005	643,503	98	630632.94	11351.39	24279.37	27369.47	1.76	3.77	4.25
Jordan	2006	25,628	95	24346.60	438.24	937.34	1056.64	1.71	3.66	4.12
Kazakhstan	2003	103,441	47	48617.27	875.11	1871.76	2109.99	0.85	1.81	2.04
Malaysia	2004	276,939	60.4	167271.16	3010.88	6439.94	7259.57	1.09	2.33	2.62
Mali	2006	12,664	90	11397.60	205.16	438.81	494.66	1.62	3.47	3.91
Mauritania	2000	3,634	99	3597.66	64.76	138.51	156.14	1.78	3.81	4.30
Morocco	2007	125,392	99	124138.08	2234.49	4779.32	5387.59	1.78	3.81	4.30
Mozambique	2002	10,366	20	2073.20	37.32	79.82	89.98	0.36	0.77	0.87
Niger	2005	7,988	90	7189.20	129.41	276.78	312.01	1.62	3.47	3.91
Nigeria	2003	178,435	50	89217.50	1605.92	3434.87	3872.04	0.90	1.93	2.17
Pakistan	2004	306,752	98	300616.96	4809.87	10521.59	13227.15	1.57	3.43	4.31
Senegal	2005	18,133	94	17045.02	306.81	656.23	739.75	1.69	3.62	4.08
Sierra Leone	2002	2,396	60	1437.60	25.88	55.35	62.39	1.08	2.31	2.60
Suriname	1999	2,159	22	474.98	8.55	18.29	20.61	0.40	0.85	0.95
Tajikistan	2004	9,682	95	9197.90	165.56	354.12	399.19	1.71	3.66	4.12
Togo	2006	4,971	13.7	681.03	12.26	26.22	29.56	0.25	0.53	0.59
Tunisia	2000	45,617	99	45160.83	812.89	1738.69	1959.98	1.78	3.81	4.30
Turkey	2005	561,075	99	555464.25	10553.82	27217.75	41659.82	1.88	4.85	7.43
Uganda	2005	24,534	15	3680.10	66.24	141.68	159.72	0.27	0.58	0.65
Uzbekistan	2003	43,028	89	38294.92	689.31	1474.35	1662.00	1.60	3.43	3.86
Yemen	2005	46,150	99	45688.50	822.39	1759.01	1982.88	1.78	3.81	4.30
For all Countries		3208969			49896.21	110547.42	138365.46	1.55	3.44	4.31

Source: Percentage of Muslim Population is taken from: http://en.wikipedia.org/wiki/Islam_by_country.

average Z1[7] for 8 OIC members' countries ranges from 0.02 percent to 0.40 percent of their GDP. This is due to very low share of Muslim population in these countries. Similarly, for these countries, Z2 and Z3 vary from 0.04 percent to 0.85 percent and 0.04 percent to 0.85 percent of their GDP respectively. For rest of the 30 OIC member countries, Z1 ranges from 0.68 percent to 1.88 percent, Z2 varies from 1.46 to 4.85 percent, while Z3 varies from 1.65 percent to 7.43 percent of the GDP of the respective country. The potential Zakat collection from Z1, Z2 and Z3, for all the countries under study, comes out to be 1.55 percent, 3.44 percent and 4.31 percent of their total GDP respectively. Although we have used 1.8 percent as Z1 for all other countries except Egypt, Pakistan and Turkey (for which we have used 2.0 percent, 1.6 percent and 1.9 percent respectively) still we get different potential Zakat collection as a share of GDP due to adjustment of GDP with Muslim population share.

5.3. Resource Shortfall and Potential Zakat Collection

Resource shortfall and potential Zakat collection have been put together in Table 4. Columns 3 and 4 shows the resources shortfall under US $ 1.25 and 2 respectively whereas columns 5 through 7 represents the potential Zakat collection under three definitions of Zakatable items. The resource requirement, under US $1.25 a day, of some of the countries for poverty elimination is too high, which cannot be met by their potential Zakat collection. For example, the resource shortfall of Burkina Faso (9.73 percent), Chad (12.78 percent), Guinea (14.62 percent), Guinea-Bissau (17.26 percent), Mozambique (29.81 percent), Niger (21.29 percent), Nigeria (10.19 percent), Sierra Leone (19.03 percent) and Uganda (10.28 percent) are very high and corresponding Zakat collection even under Z3 is very low. However, resource shortfall of the countries like Albania, Algeria, Azerbaijan, Djibouti, Egypt, Iran, Jordan, Kazakhstan, Malaysia, Morocco, Pakistan, Tajikistan, Tunisia, Turkey, Yemen can be covered from collection of Z1 (see Table). If we take into account the administrative cost of Zakat collection (assuming 10 to 20 percent of the potential Zakat collection), even then Z2 and Z3 collection is enough for fulfilling both the amount of resource shortfall and administrative cost. The countries, like Gabon (0.03 percent) Mauritania (1.84), Senegal (3.20 percent) and Suriname (0.54 percent) cannot meet their resource shortfall by Z1 but these can meet it by utilising Z2. The nineteen OIC member countries can easily eliminate poverty form generating their own Zakat resources, whereas the rest of the sample countries cannot meet their resource shortfall from their own resources.

Resource shortfall, under US $1.25 a day and US $ 2.0 a day, on average, is 1.53 percent and 5.20 percent of the GDP for all the countries under study. The corresponding amount, which can be collected under Z1, Z2 and Z3, estimated to be 1.55 percent, 3.44 percent and 4.31 percent of their total GDP, respectively. These resources are not only sufficient to provide for the shortfall and eliminate the extreme poverty but also can generate surplus.

[7]Z1 = [{(0.018) (Adjusted GDP/ GDP)}* 100]. Similarly Z2 and Z3 are calculated by using average of eight Muslim countries, which is 3.85 percent and 4.34 percent of the GDP respectively. For Egypt, Pakistan and Turkey Z2 is 3.9 percent, 3.5 percent and 4.9 percent and Z3 is 4.9 percent, 4.4 percent and 7.5 percent respectively.

Resource shortfall under US $ 2.0 a day is high. Countries, which could meet their resource shortfall under US $ 1.25 a day from Zakat proceeds, are not able to meet their resource shortfall under US $ 2.0 a day. The countries which added to such list are Djibouti, Pakistan, Tajikistan and Yemen (see Table 4). As noted above that resource shortfall under US $ 2.0 a day cannot be met by resources raised through potential Zakat collection. The maximum that can be collected is estimated to be 4.31 percent of the GDP of all countries under study , whereas corresponding resource required are estimated to be 5.20 percent of the GDP of these countries. However, some resource rich countries are not included in the sample due to non-availability of the data. If these countries also

Table 4

Resource Shortfall and Potential Zakat Collection

1	2	3	4	5	6	7
OIC- Member Countries	Survey Year	Resource Shortfall % of GDP (US $ 1.25)	Resource Shortfall % of GDP (US $ 2)	Z1 (% of GDP)	Z2 (% of GDP)	Z3 (% of GDP)
Albania	2005	0.03	0.19	1.04	2.23	2.52
Algeria	1995	0.16	1.20	1.78	3.81	4.30
Azerbaijan	2005	0.04	0.08	1.68	3.60	4.05
Bangladesh	2005	5.60	23.10	1.58	3.39	3.82
Benin	2003	6.22	21.25	0.36	0.77	0.87
Burkina Faso	2003	9.73	30.07	0.94	2.00	2.26
Cameroon	2001	2.69	9.95	0.36	0.77	0.87
Chad	2002	12.78	35.06	0.97	2.08	2.34
Comoros	2004	8.86	23.30	1.78	3.81	4.30
Cote d'Ivoire	2002	2.01	8.32	0.69	1.49	1.68
Djibouti	2002	1.48	6.54	1.78	3.81	4.30
Egypt	2004	0.04	0.59	1.80	3.51	4.41
Gabon	2005	0.03	0.26	0.02	0.04	0.04
Gambia	2003	5.64	18.58	1.71	3.66	4.12
Guinea	2002	14.62	36.46	1.53	3.27	3.69
Guinea-Bissau	2002	17.26	58.24	0.68	1.46	1.65
Guyana	1998	0.66	1.88	0.18	0.39	0.43
Iran	2005	0.02	0.14	1.76	3.77	4.25
Jordan	2006	0.04	0.09	1.71	3.66	4.12
Kazakhstan	2003	0.03	0.41	0.85	1.81	2.04
Malaysia	2004	0.02	0.09	1.09	2.33	2.62
Mali	2006	8.11	25.18	1.62	3.47	3.91
Mauritania	2000	1.84	8.20	1.78	3.81	4.30
Morocco	2007	0.06	0.56	1.78	3.81	4.30
Mozambique	2002	29.81	72.09	0.36	0.77	0.87
Niger	2005	21.29	56.49	1.62	3.47	3.91
Nigeria	2003	10.19	25.84	0.90	1.93	2.17
Pakistan	2004	1.00	6.77	1.57	3.43	4.31
Senegal	2005	3.20	11.66	1.69	3.62	4.08
Sierra Leone	2002	19.03	56.26	1.08	2.31	2.60
Suriname	1999	0.54	1.71	0.40	0.85	0.95
Tajikistan	2004	1.55	8.19	1.71	3.66	4.12
Togo	2006	6.71	26.26	0.25	0.53	0.59
Tunisia	2000	0.04	0.46	1.78	3.81	4.30
Turkey	2005	0.05	0.24	1.88	4.85	7.43
Uganda	2005	10.28	31.35	0.27	0.58	0.65
Uzbekistan	2003	4.07	14.40	1.60	3.43	3.86
Yemen	2005	0.88	4.94	1.78	3.81	4.30
On Average		1.53	5.20	1.55	3.44	4.31

Source: Based on Tables 2 and 3.

collect Zakat to its potential and transfer their surplus to the common pool and if these funds could be provided for the resource deficit countries then we hope that the deficit in resource can be met and poverty under US $ 2 a day can easily be eliminated.

6. SUMMARY AND CONCLUSION

The poverty has been the serious problem and challenge for the Developing countries. Since majority of the OIC countries fall in the same category, therefore, these countries also face the same problems and challenges. Different policies and strategies, in addition to safety-nets programme have been adopted in the past to alleviate poverty, but poverty still persists. Some of the Muslim countries have implemented the system of Zakat officially and while in other it is unofficial matter and they have ignored the collection and distribution. But the fact is that none of the Muslim country has enforced Zakat in letter and spirit. It is believed that if the system is enforced in letter and spirit then extreme poverty can be eliminated. The paper has been written in this spirit.

The paper has estimated the resource required by 38 OIC member countries and potential Zakat collection for poverty elimination. We have employed the poverty gap index based on US $ 1.25 and US $ 2.0 as reported in World Bank Indicators (2009) for measuring resource shortfall. Our results show that fifteen countries of the sample including Albania (0.03 percent), Algeria (0.16 percent), Azerbaijan (0.04 percent), Gabon (0.03 percent), Egypt (0.04 percent), Guyana (0.66 percent), Iran (0.02 percent), Jordan (0.04 percent), Kazakhstan (0.03 percent) Malaysia (0.02 percent), Morocco (0.06 percent), Suriname (0.54 percent), Tunisia (0.04 percent), Turkey (0.05 percent) and Yemen (0.88 percent) require small amount of resources for poverty elimination. Some countries, like Cameroon, Cote d'Ivoire, Djibouti, Mauritania, Pakistan, Senegal and Tajikistan resource requirement for poverty elimination ranges from 1 percent to about 3 percent of their GDP. Resources shortfall for some countries is quite high. These countries are Mozambique (29.81 percent), Niger (21.29 percent), Sierra Leone (19.03 percent), and Guinea-Bissau (17.26 percent). Similarly resource shortfall, under US $2 a day, for countries like Guinea-Bissau (58.24 percent), Mozambique (72.09 percent), Niger (56.49 percent), Sierra Leone (56.26 percent), Chad (35.06 percent), Guinea (36.46 percent) and Uganda (31.35 percent) is quite high. The total resource shortfall for all the sample countries under US $ 1.25 a day and US $ 2.0 a day is estimated to be 1.53 percent and 5.20 percent of their total GDP respectively.

We have used Kahf (1989) for the estimation of potential Zakat collection with some modifications. On average, Z1 for 8 OIC member countries ranges from 0.02 percent to 0.40 percent of their GDP. This is due to very low share of Muslim Population. Similarly, for these countries, Z2 and Z3 vary from 0.04 percent to 0.85 percent and 0.04 percent to 0.85 percent of their GDP respectively. For rest of the 30 OIC member countries, Z1 ranges from 0.68 percent to 1.88 percent, Z2 varies from 1.46 to 4.85 percent, while Z3 varies from 1.65 percent to 7.43 percent of the GDP of the respective country. The potential Zakat collection from Z1, Z2 and Z3, for all the countries under study, comes out to be 1.55 percent, 3.44 percent and 4.31 percent of their total GDP respectively.

Keeping in view the resource required and resource available through potential Zakat collection, the general picture that emerges is as follow. Most of the African OIC

member countries cannot meet their resource requirement by their own potential Zakat collection. However, countries like Albania, Algeria, Azerbaijan, Djibouti, Egypt, Iran, Jordan, Kazakhstan, Malaysia, Morocco, Pakistan, Tajikistan, Tunisia, Turkey, Yemen resource shortfall can be covered from collection of Z1. If we take into account the administrative cost of Zakat collection (assuming 10 to 20 percent of the potential Zakat collection), even then Z2 and Z3 collection is enough for fulfilling both the amount of resource shortfall and administrative cost. The countries, like Gabon (0.03 percent) Mauritania (1.84), Senegal (3.20 percent) and Suriname (0.54 percent) cannot meet their resource shortfall by Z1 but these can meet it by utilising Z2. The nineteen OIC member countries can easily eliminate poverty form generating their own Zakat resources, whereas the rest of the sample countries cannot meet their resource shortfall from their own resources.

Resource shortfall, under US $1.25 a day and US $ 2.0 a day, on average, is 1.53 percent and 5.20 percent of the GDP for all the countries under study. The corresponding amount, which can be collected under Z1, Z2 and Z3, estimated to be 1.55 percent, 3.44 percent and 4.31 percent of the total GDP, respectively. These resources are not only sufficient to provide for the shortfall and eliminate the extreme poverty but also can generate surplus.

Resource shortfall under US $ 2.0 a day is high. Countries, which could meet their resource shortfall under US $ 1.25 a day from Zakat proceeds, are not able to meet their resource shortfall under US $ 2.0 a day. The countries which added to such list are Djibouti, Pakistan, Tajikistan and Yemen. The maximum Zakat that can be collected is estimated to be 4.31 percent of the GDP of all countries under study, whereas corresponding resource required are estimated to be 5.20 percent of the GDP of these countries. However, some resource rich countries are not included in the sample due to non-availability of the data. If these countries also collect Zakat to its potential and transfer their surplus to the common pool which could be provided for the resource deficit countries, then we hope that the deficit in resource can be met and poverty under US $ 2 a day can easily be eliminated. However, this requires globalisation of Zakat and serious efforts on the part of the OIC-member countries.

Appendix Table 1

Poverty in the Selected Muslim Countries

1	2	3	4	5	6	7
OIC-Member Countries	Population Below National Poverty Line (%)	Survey Year	Population Below $ 1.25 a Day (%)	Poverty gap at $ 1.25 a day (%)	Population Below $ 2 a Day (%)	Poverty Gap at $ 2 a Day (%)
Albania	25	2005	<2	<0.5	7.8	1.4
Algeria	NA	1995	6.8	1.4	23.6	6.4
Azerbaijan	49	2005	<2	<0.5	<2	<0.5
Bangladesh	45	2005	49.6	13.1	81.3	33.8
Benin	37	2003	47.3	15.7	75.3	33.5
Burkina Faso	45	2003	56.5	20.3	81.2	39.2
Cameroon	48	2001	32.8	10.2	57.7	23.6
Chad	80	2002	61.9	25.6	83.3	43.9
Comoros	60	2004	46.1	20.8	65	34.2
Cote d'Ivoire	NA	2002	23.3	6.8	46.8	17.6
Djibouti	50	2002	18.8	5.3	41.2	14.6
Egypt	16.7	2004	<2	<0.5	18.4	3.5
Gabon	NA	2005	4.8	0.9	19.6	5
Gambia	NA	2003	34.3	12.1	56.7	24.9
Guinea	40	2002	70.1	32.2	87.2	50.2
Guinea-Bissau	NA	2002	48.8	16.5	77.9	34.8
Guyana	NA	1998	7.7	3.9	16.8	6.9
Iran	40	2005	<2	<0.5	8	1.8
Jordan	30	2006	<2	<0.5	3.5	0.6
Kazakhstan	26	2003	3.1	<0.5	17.2	3.9
Malaysia	8	2004	<2	<0.5	7.8	1.4
Mali	64	2006	51.4	18.8	77.1	36.5
Mauritania	57	2000	21.2	5.7	44.1	15.9
Morocco	17	2007	2.5	0.5	14	3.1
Mozambique	70	2002	74.7	35.4	90	53.5
Niger	63	2005	65.9	28.1	85.6	46.6
Nigeria	60	2003	64.4	29.6	83.9	46.9
Pakistan	35	2004	22.6	4.4	60.3	18.7
Senegal	54	2005	33.5	10.8	60.3	24.6
Sierra Leone	68	2002	53.4	20.3	76.1	37.5
Suriname	NA	1999	15.5	5.9	27.2	11.7
Tajikistan	60	2004	21.5	5.1	50.8	16.8
Togo	32	2006	38.7	11.4	69.3	27.9
Tunisia	14.1	2000	2.6	<0.5	12.8	3
Turkey	20	2005	2.7	0.9	9	2.6
Uganda	35	2005	51.5	19.1	75.6	36.4
Uzbekistan	NA	2003	46.3	15	76.7	33.2
Yemen	45.2	2005	17.5	4.2	46.6	14.8

Source: World Bank (2009).

REFERENCES

Abu-Saud, Mahmoud (1988) *Contemporary Zakat.* Zakat and Research Foundation, Ohio.

Abu 'Ubaid Al Qasim Ibn Sallam (Circa 945), (1934) *Kitab Al Amwal* (the book of wealth), Al Maktabah Al Tijariyyah Al Kubra, Cairo, Egypt.

Al Tahir, Abdallah (1997) *Zakat* Proceeds and Developments of Society. In Monzer Kahf (editor) *Economics of Zakat.* Book of Reading No. 2, Islamic Research and Training Institute, Islamic Development Bank Group, Jeddah. 507–64.

Ahmed, Habib (2008) Zakat, Macroeconomic Policies, and Poverty Alleviation: Lessons from Simulations on Bangladesh. *Journal of Islamic Economics, Banking and Finance* 4:2.

Ahmed, Habib (2004) Role of Zakat and Awqaf in Poverty Alleviation. Islamic Research and Training Institute, Islamic Development Bank Group, Jeddah. (Occasional Paper No. 8).

Ahmed, Habib (2002) Financing Microenterprises: An Analytical Study of Islamic Microfinance Institutions. *Islamic Economic Studies* 9, 27–64.

Awad, Mohammad H. (1989) Adjusting Tax Structure to Accommodate Zakat. In I. M. Imtiazi, *et al.* (eds.) *Management of Zakat in Modern Society*. IRTI, IDB. 77–96.

Chowdhry, A. R. (1991) Ushr and Pakistani Society. *The Daily Muslim*. 27 December.

Hassan, M. Kabir, and Jauanyed Masrur Khan (2007) Zakat, External Debt and Poverty Reduction Strategy in Bangladesh. *Journal of Economic Cooperation* 28:4,1–38.

Hussain, M. and Nasim Shah Shirazi (1994) Role of Zakat and Ushr in Rural Development. Paper Presented at the Seminar on Rural Development in Islamic Perspective, Islamabad, International Institute of Islamic Economics, June 4-8.

Khan, M. Fahim (1985) Macro Consumption Function in an Islamic Framework. *Journal of Research in Islamic Economics* 1:2, 1–24.

Kahf, Monzer (1989) Zakat: Unresolved Issues in the Contemporary Fiqh. *Journal of Islamic Economics* 2:1, 1–22.

Kahf, Monzer (1993) Zakat Management in Some Muslim Societies. Islamic Research and Training Institute, Islamic Development Bank, Jeddah. (Background Paper No. 11).

Kahf, Monzer (1999) Zakat: Performance in Theory and Practice. Paper presented at the International Conference on Islamic Economics Towards the 21st Century. Kuala Lumpur, August.

Kahf, Monzer (2004) Shari'ah and Historical Aspects of Zakat and Awqaf. Background paper prepared for Islamic Research and Training Institute, Islamic Development Bank.

Mannan, M. A. (1983) Zakat, its Disbursement and Inter-poor Distributional Equity. *Thoughts on Economics* 4: 8. 2–14.

Maududi, Abul'Ala (1988) *Ma'ashiaat-i-Islam.* Islamic Publication, Lahore.

Mohammad Rawwas Qal'aji (1984) Mausu'at Fiqh, 'Umar Ibn Al Khattab (Jurisprudence Encyclopedia of Umar Ibn Al Khattab), Maktabah Al Falah, Kuwait.

Obaidullah and Tariqullah (2008) Islamic Microfinance Development—Challenges and Initiatives. Islamic Development Bank, Jeddah. (Policy Dialogue Paper No. 2).

Pogge, T. and T. Reddy (2003) How not to Count the Poor. Columbia University, New York. (Mimeographed). Retrieved August 15, 2004 from http://www.columbia.edu/~sr793/count.pdf.

Rahman, Saha Muhammed Habibur (1980) Zakat—A Case for Equitable Distribution of Income and Wealth. In K.T. Hosain, *et al.* (eds.) *Thoughts on Islamic Economics.* Islamic Economics Research Bureau, Dhaka, 94–101.

Ravallion and Chen (2008) The Developing World is Poorer than We Thought, But No Less Successful in the Fight against Poverty. These estimates are for 1990 and 2005, calculated using the $1.25 international poverty line.

Reddy, S. (2009) The Emperor's New Suit: Global Poverty Estimates Reappraised. (SCEPA Working Paper, 2009-11).

Sadeq, A. H. M. (1996) Ethico-Economic Institution of Zakat: An Instrument of Self-reliance and Sustainable Grassroots Development. *IIUM Journal of Economics and Management* 12:2.

Sadeq, Abul Hasan M. (1989) Distribution of Wealth through Transfer Payments. *Hamdard Islamicus* 1:13, 33–45.

Salama, Abdin Ahmed (1990) Voluntary and Compulsory Applications of Zakat: A Case Study of Sudan 1405-1410. Paper presented at the Third International Conference on Zakat, Kuala Lumpur, Malaysia, May 14-17.

Salama, Abdin Ahmed (1982) Fiscal Analysis of Zakat with Special Reference to Saudi Arabia's Experience in Zakat. In Mohammad Arif (editor) *Monetary and Fiscal Policy of Islam.* International Centre for Research in Islamic Economics, King Abdul Aziz University, Jeddah.341–64.

Sheikh, Abdul Aziz (1980) Concept of Zakat: A Survey of Qur'anic Texts and Their Explanation in Shari'ah and Contemporary Economics. In M. Raquibuzzaman (ed.) *Some Aspects of Economic of Zakat.* pp. 3–68.

Shirazi, Nasim Shah (2004) Prospects of Poverty Elimination through the Institution of Zakat: A Case of OIC Member Countries. International Conference on Poverty in the Muslim World and Communities, IIUM, 14–1 December.

Shirazi, Nasim Shah (2006) Providing for the Resource Shortfall for Poverty Elimination through the Institution of Zakat in Low-Income Muslim Countries. *IIUM Journal of Economics and Management* 14:1.

World Bank (2009) PovcalNet, PovcalNet Online Poverty Analysis Tool. The World Bank, Washington, DC.

World Bank (2008) Development Data Group, 2008 World Development Indicators Online. Washington, DC: The World Bank. Available at: http://go. worldbank.org/U0FSM7AQ40

Yaumidin, Karomah U. (2009) Islamic Alternative: Comparative Study between Indonesia and Malaysia. Paper presented in The International Conference on Islamic Economics and Economics of the OIC Countries, Kuala Lumpur, 28-29 April.

Comments

As the title suggest, this is an important area in poverty alleviation through potential Zakat Collection in OIC-member Countries. First of all, apart from the technical comments, I would like to say that it is difficult to comment on the text as a through editing of the paper is needed for the benefit of the reader.

Secondly, authors claims at page 5 that earlier studies were either limited in scope or lack the proper methodology for estimation of the resources needed and potential zakat collection. But what constitutes a proper methodology is not explained in the paper clearly. Thirdly, the authors have used poverty gap index based on $ 1 a day poverty or $ 2 a day estimated by the World Bank to compute the resource shortfall for poverty alleviation but have not mentioned with clarity that how they have converted into absolute number.

Thirdly, authors reviewed that Kahf (1989) using National Income Accounts estimated zakat potential for eight Muslim countries which is based on three different opinions of jurists regarding zakatable items namely Z1, Z2 and Z3.

- Z1 was estimated in accordance with the majority traditional view according to which Zakat was levied on agriculture, livestock, stock in trade, gold, silver and money.
- Z2 was based in accordance with the views of contemporary Muslim scholars where Zakat can be deducted from net returns of manufacturing concerns and building rents and from net savings out of salaries.
- Z3 was based on Malikite views, where Zakat base includes buildings and other fixed assets except those assigned for personal and family use. According to these definitions, under Z1, Zakat can be collected in the range of 1-2 percent of GDP, under Z2 from 3.1- 4.95 and under Z3 from 3.25 to 7.5 percent of the GDP for the eight Muslim countries.

The authors claim that Kahf (1989) estimates has a shortcoming of not taking into account of non-Muslims population and claim that their estimates are better than Khaf (1989). While authors have not applied the above method using national accounts as done by Kahf, the authors should not claim that these are their estimates and are better than Kahf. In my opinion, authors have simply adjusted Kahf estimates by multiplying it to non-Muslim population ratios with Kahf's estimates. The authors' estimates can be regarded as Kahf's non-Muslim population adjusted estimates.

Finally, it is also important to discuss the existing extent of Zakat collection in Pakistan and in other Muslims countries and how Zakat collection can be enhanced to fill the gap in order to reduce poverty. Currently, few hundred billion of rupees have been collected in Pakistan as people are not willing to pay Zakat through government system due to lack of creditability of the government. Similar is the case with other Muslim countries. Hence, its scope for poverty alleviation will remain limited.

Talat Anwar

Canadian International Development Agency,
Programme Support Unit, Islamabad.