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## Towards a Maqasid al-Shariah based Development Index

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Title: Towards a Maqasid al-Shariah based Development Index

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**Abstract**

This study examines the theoretical framework, develops axioms and a method to gauge socio-economic development in line with Maqasid al-Sharaih. The measure is disaggregated and multidimensional so as to facilitate policy guidance at various levels of aggregation.

Keywords: Human Development Index, Maqasid Shariah Index, Multidimensional Index

JEL Classifications: C43, Z12, Z13.

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# Towards a Maqasid al-Shariah based Development Index

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## 1. Introduction

Debate on how to measure development and progress of societies has never ended. Different normative theories have been proposed and many more measures or indices have been devised. These range from simple measure such as GDP per capita to more complex Human Development Index. Some of these indices measured progress and development through the degree of reduction in income poverty. Some went further and tried to measure growth in social opportunities and distribution of those opportunities within low income groups so as to measure inclusiveness of growth (e.g. Ali and Son, 2007). Some went even further and attempted to measure capabilities deprivation and the extent to which these deprivations can be reduced (e.g., Alkire and Foster, 2011). Going further, some have focused on freedom deprivation to measure reduction in multidimensional poverty.

However, all these measures involve value judgment. Without a sound moral underpinning they remain ad hoc because moral values cannot be created from empirical observations only. Revealed knowledge provided by revealed religion can provide the purpose of life and moral values that can underpin the purpose and scope of measurement of wellbeing and development.

This paper begins with rationalization of why and what to measure (Section-I). It then provides an axiomatic approach (Section-II) and an application to measure Maqasid al-Shariah based development (Section-III) with some conclusions and thoughts on further possibilities.

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## SECTION-I

Islam, which is continuation and completion of the monotheistic religions, provides a law of dos and don'ts called Shariah. Scholars who examined Shariah rules observed that essentially all dos and don'ts that are in Shariah are for protection and continuity of human society. They found that these rules are there for protection of five aspects or dimensions:

1. Protection of self (or life);
2. Protection of faith;
3. Protection of wealth;
4. Protection of intellect; and
5. Protection of progeny.

Protections mentioned here are not for one time protection. They are also not restricted to protection against degradation from the existing level of each dimension (say the dimension of life) [in whatever way it is measured] but they are also about enhancement and improvement. In *fiqh* terminology it is about *daf al-mafasid* (removal of degrading factors and constraints) *jalb al masaleh* (attainment and enhancement of benefits). Thus for example, protection of self (or life) can include protection against:

- Attack on life (by others or self-inflicted)
- Violent crimes
- Injury (by others or self-inflicted or due to exogenous factors)
- Loss of dignity and honor
- Disease
- Unhealthy living conditions
- Hunger
- Poverty
- Fear and Insecurity of life, etc.

From the enhancement aspect it can include:

- Health
- Quality of life, Feeling of contentment
- Moderation in consumption
- Healthy habits, etc.

This opens up the question of minimum protection and then also enhancement of the dimension and likelihood of its sustainability at the achieved level. All these aspects are desirable. Since Shariah provides some basic protections, therefore anything that strengthens and enhances those protections is also desirable.

## 1.1 Objectives of Islam vs Objectives of Shariah

The objective or purpose of Islam is to guide human beings to make them successful, individually and collectively in al-Akhirah (long-run) and in this world (short-run). It is also to save them from the great failure or the ultimate great loss. The purposes of all prophets to mankind had been: (i) to recite them ayat of Allah, (ii) cleanse impurities of all kinds from humans and enhance them, (iii) teach them the book, (iv) provide them wisdom, and (v) teach them that they did not know.<sup>1</sup> Since the book (Shariah) deals with legal issues (the critical dos and don'ts) therefore its purpose is to provide protection of some basic elements: self, faith, wealth, intellect, and progeny. So that (a) the life continues and (b) it becomes easy to qualify the test and (c) the opportunity of testing remains until the dooms day (*yaoum al-qiyamah*).

Whereas, *hikmah* (wisdom) is more general it expands to moral values, enhancement of collective life, and understanding of the basics of Shariah. It pertains to development, refinements, and enhancements of success in this world and in al-Akhirah by guiding us to best ways for putting Shariah into practice. It pertains to how we can act in our collective life based on our common understanding of Shariah while taking into consideration each other's psychology and our own position in this universe. The Quranic reference to Luqman's wisdom points to our above understanding and explanation.

*Tazkiyah* on the other hand pertains more to individual souls, cleansing them of impurities (physical, mental and spiritual) that provides enhancement and growth of individual character. It can be collective only in the sense of aggregating over individuals.

Measurement of society's development for success in this world and chances of success of average individual in al-Akhirah will require methods to measure these three major aspects (*tazkiyah*, book and *hikmah*). The progress in attainment of the objectives of Shariah provides the basic minimum for humans. The progress in

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<sup>1</sup> Prophet Ibrahim's supplication to Allah mentioned in Quran (2:129) was for raising a prophet from among them who shall recite to them Allah's ayat and teach them His book and wisdom, and purify them. Allah accepted this supplication and sent His Prophet Muhammad (*sallalah-o-alaihi-wassallam*) but gave His own hierarchy of these four demands/tasks/requirements from the Prophet. Allah moved the fourth task to be the second and added a fifth task as well. Quran (2:151) mentions that Allah has sent among you a prophet from amongst you who recites to you Allah's ayat, purifies you and teaches you the Book and wisdom and teaches you that which you did not know.

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*hikmah* attainment provides measurement of collective outcome. The progress in *tazkiyah* attainment provides measurement focused at individualistic level that is in hearts and hidden.

### 1.2 On the Measurement of Socio-Economic Development

We cannot measure *tazkiyah* (and *taqwah*) of others and we are required to do this evaluation.<sup>2</sup> So, this aspect have to be dropped from our measurement. The nature of *tazkiyah* (and *taqwah*) is such that it determines the outcome of the test that Allah has created in this world for humans. This test is in longevity of life as well as in short life; it is in plenty as well as in dearth of wealth; it is in having offspring as well as infertility; it is also in having high intellect as well as in low intellect; and in high state of iman and low state of iman. (However, absence of intellect and absence of cognizance are a different that they are exempted from the test. Only insane and asleep adults are not accountable). Therefore, again we cannot conclude that the *tazkiyah* is increasing or decreasing with wealth, life, progeny, or intellect. Hence the socio-economic progress indicator we are after will abstract away from this aspect.

In this context one can understand the meaning of the authentic hadith. The Prophet (peace and blessings of Allah be upon him) said: "How wonderful is the situation of the believer, for all his affairs are good. If something good happens to him, he gives thanks for it and that is good for him; if something bad happens to him, he bears it with patience, and that is good for him. This does not apply to anyone but the believer." (Narrated by Muslim, no. 2999).<sup>3</sup>

Suhaib reported that Allah's Messenger (ﷺ) said: Strange are the ways of a believer for there is good in every affair of his and this is not the case with anyone else except in the case of a believer for if he has an occasion to feel delight, he thanks (God), thus there is a good for him in it, and if he gets into trouble and shows resignation (and endures it patiently), there is a good for him in it.<sup>4</sup>

حَدَّثَنَا هَدَّابُ بْنُ خَالِدٍ الْأَزْدِيُّ، وَشَيْبَانُ بْنُ فَرُّوخَ، جَمِيعًا عَنْ سُلَيْمَانَ بْنِ الْمُغِيرَةِ، - وَاللَّفْظُ لِشَيْبَانَ - حَدَّثَنَا سُلَيْمَانُ، حَدَّثَنَا ثَابِتٌ، عَنْ عَبْدِ الرَّحْمَنِ بْنِ أَبِي لَيْلَى، عَنْ صُهَيْبٍ، قَالَ قَالَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ "عَجَبًا لِأَمْرِ الْمُؤْمِنِ إِنَّ أَمْرَهُ كُلَّهُ خَيْرٌ وَلَيْسَ ذَلِكَ لِأَحَدٍ إِلَّا لِلْمُؤْمِنِ إِنْ أَصَابَتْهُ سَرَاءٌ شَكَرَ فَكَانَ خَيْرًا لَهُ وَإِنْ أَصَابَتْهُ ضَرَاءٌ صَبَرَ فَكَانَ خَيْرًا لَهُ " 5.

<sup>2</sup> One can do self-evaluation of own *iman* and *taqwa* but not of others in any real sense.

<sup>3</sup> <http://hadithcheck.blogspot.com/2010/11/sahih-how-wonderful-is-affair-of.html>

<sup>4</sup> <http://sunnah.com/urn/271380>

<sup>5</sup> Reference: Sahih Muslim 2999

However, among the tests too much or too little of a good thing pose sever test of humans as compared to having moderate amounts of good things that are sufficient. If someone is given plenty of wealth than others then if such people are spending their wealth on themselves, their family and on others as charity then this would be beneficial for them as well as beneficial for the society. We would say the society is progressing.

Simultaneous to the above message of *indeterminacy* it is also clear from Islam's message that Allah does not want people to put themselves in undue hardships neither in acts of worship (*ibadah*) nor in their mutual dealings (*muamalat*); He does not recommend inviting tests and difficulties on themselves. Allah would like to provide ease over difficulty and would like his slaves also to choose in similar way. Thus there is a clear preference for ease and lightness over difficulties and burden. Due to this, health is preferable over disease (though there can be test in both situations), sufficiency over poverty, open available time over shortage of time, happiness over misery, etc.

### 1.3 Narrowing the Focus of Measurement

Since the objectives of laws are to provide a minimum level of protection, it is relatively easier to measure and compare progress towards achievement of that minimum than measuring and comparing progress across societies through variables that do not have an upper bound. With minimum level attainment approach we can measure whether or not these protections are universally available to everyone in the existing and the future population. If these protections are not available to all, then the progress in this direction can be measured by finding the proportion of the existing population who do not fall in the deprived group. Or 1 minus the proportion of population to whom those protections are not available. In this method of measurement the target/goal becomes well-defined and the gap between the present position and the target provides a measure of society's progress. Therefore, we intend to focus on the 'book' part and gauge the progress in terms of attainment of minimum threshold for each *maqsad* (objective) of Shariah. While *tazkiyah* and *hikmah* (which respectively come before and after the 'book' in the hierarchy) will be captured indirectly, as the attainment of the legal objectives at a larger population level is not possible without progress in these other two aspects.

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In-book reference: Book 55, Hadith 82

USC-MSA web (English) reference: Book 42, Hadith 7138

In the section below we provide an axiomatic approach with an application to measure Maqasid al-Shariah based development. In this example we have used only the opinion surveys, however, it need not be restricted to such. Objective and verifiable economic and social data can also be combined.

## SECTION II

### 2.1 Practical Aspects of Measurement

The moral backslide along with human sufferings and socio-economic decline in most of the Muslim countries, and in developing countries in general pose serious policy challenges for these countries in the context of human welfare. The safeguarding of faith, life, intellect, posterity, and property-the Maqasid al-Shari'ah (MS)-has been considered as a pivotal to enhancing human welfare by eminent classical Muslim scholars like al-Ghazali and al-Shatiabi. Relatively more recently, Chapra (2008), among others, emphasizes the use of MS in socio-economic development of Muslim world. There has been a need to build an information base on MS to assist policy makers in realising these goals (Maqasid) which not only cover social and economic dimensions, like human development, but also include values, morality, family, and faith and thus provide an encompassing framework for development in Muslim countries. The paper aims to contribute to this effort by developing a framework by deriving axioms from Qura'n and Sunnah related to each objective of Shari'ah and then construct a Maqasid al-Shari'ah (MS) index following Alkire and Santos (2013) and Alkire and Foster (2011) dual cut-off multidimensional counting approach. The paper selects a counting approach vis-à-vis a welfare approach since the former is an application tool whereas latter is a theoretical framework (see, Atkinson, 2003, for comparison between these two approaches). Among the counting approaches, the paper chooses Alkire-Foster (AF) approach due to its axiomatic properties and empirical content. Since no survey questionnaire is specifically designed for measuring MS, the MS are quantified by grouping the survey questions in World Values Survey (WVS) that seem to relate to each dimension of MS. The advantage of using WVS dataset is that it is available in public domain for most of the countries and hence provides a common dataset for a cross-country comparison. The questionnaire used is checked for conformity with the MS axioms.

As noted above, the multidimensionality of human welfare has long been recognized by Muslim scholars and much earlier than its present-day focus. However, Sen (1985, 2000) and Haq (1999) made it popular and usable by



developing Human Development Index (HDI), first issued by UNDP in 1990 and every year thereafter with improvements in data and method.<sup>6</sup> The parsimony and multidimensionality have made HDI a very good indicator for evaluating human development across the world. Inspired by this experience, many scholars have attempted to extend HDI in MS direction (see, for example, Dar (2004); Anto, 2009; Rehman and Askari, 2010; Amin et. al., 2011). Although these indices facilitate a cross-country comparison and help policy makers to set goals yet they do not provide details or decomposition at regional or at household/individual levels within each country. Such details could be useful for effective policy implementation at grass root level and could also be applied for project appraisal, and for evaluation of sectoral or institutional performance. At the same time, it could be aggregated to show an overall picture. The present paper is a first attempt in this direction.

## 2.2 Axioms for Maqasid al-Shariah Measurement

The objectives of Shari'ah could be achieved in the highest degree only when Shari'ah is implemented in true letter and spirit. The section illustrates the desirable properties of an MS index with a key objective to attain justice in a society. These desirable properties are mentioned as axioms. In general, higher values of MS index are desirable but for the MS deprivation index the lower values are appropriate.

These axioms are derived from the *Shari'ah* (Qur'an and Hadith). One of these *ahadith* is about the questions to be asked from every person by Allah on the Day of Judgement. These questions are related to life, youth, earning & spending wealth, and knowledge, which can be linked to four of the five maqasid al-Shari'ah: preservation of life, preservation of posterity, preservation of property, and preservation of intellect respectively whereas the fifth- preservation of faith-encompasses all five questions: *The prophet Muhammad (S.A.W.) said: "The son of Adam will not pass away from Allah until he is asked about five things: how he lived his life, and how he utilized his youth, with what means did he earn his wealth, how did he spend his wealth, and what did he do with his knowledge."* (Sahih hadith reported by Imam Al-Tirmithi)

Because of the importance of these five dimensions for this world and the world hereafter, we list some of the axioms for each MS dimensions to guide us in developing or selecting appropriate indicators for MS:

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<sup>6</sup> Stanton (2007) provides a good summary of the history of Human Development Index.

## **1. Wealth Protection Axioms**

- 1.1 Transfer: MS index should increase whenever *Zakat and Sadaqat* are transferred from an individual above the poverty line to an individual below the poverty line.
- 1.2 Intergenerational Transfer: MS index should increase whenever inheritance amount is transferred according to *Shari'ah* to all heirs.
- 1.3 Exchange: MS index should decrease whenever money is borrowed/lent on interest (*Riba*).
- 1.4 Spending: if spending increases in *Israaf* or *Tabzeer* then MS index should decrease in value. In case of moderation (*Iqtisad*) in spending in *Halaal* and *Mubaah* goods and services then MS index should increase in value.
- 1.5 Earning: If *halaal* earning increases then MS index should increase and if earning through *haraam* means (like gambling, hoarding, less-than full measurement *tatfeef*, *riba*, etc) increases then MS index should decrease.
- 1.6 Accumulation: if wealth accumulates with regular payment of *Zakat and Sadaqat* then MS index should increase and if wealth accumulates without any payment of *Zakat* then MS index should decrease.
- 1.7 Risk: if risk of loss of wealth increases then MS index should decrease.
- 1.8 Fairness: if there is fair access to earning then MS index should increase.

## **2. Life Protection Axioms:**

- 2.1 Security: MS index should increase when life security increases.
- 2.2 Health: MS index should increase if there is an access to health facilities.
- 2.3 Time use and leisure activities: MS index should increase if time is better utilized in *shari'ah* compliant activities.

2.4 Physical fitness: MS index should increase for easy and affordable access to sports and fitness facilities.

### **3. Intellect Protection Axioms:**

3.1 Fairness: MS index should increase if there is fair access to learning for all.

3.2 Harmfulness: MS index should decrease if there is an easy access to activities harmful for intellect.

3.3 Practice: MS index should increase if religious knowledge is turned into practice.

3.4 Education: MS index should increase with the level of education.

3.5 Research: MS index should increase for useful and applied research.

### **4. Faith Protection Axioms:**

4.1 Prayers: MS index should increase for easy access to Masjid for daily prayers

4.2 Umrah/Hajj: MS index should increase with affordability for performing Umrah/ Hajj

4.3 Fasting: MS index should increase for convenience in fasting during *Ramadhan*.

4.4 Zakat: MS index should increase for easy access to zakat collection/payment.

4.5 Religious education: MS index should increase with easy access to quality Islamic education

4.6 Time spent: MS index should increase for time spent on religious education and programs or time spent in Masjid.

4.7 *Ghuloo*: MS index should decrease for exceeding what is required.

## **5. Posterity Protection Axioms:**

- 5.1 Marriage: MS index should increase for easy and affordable access to marriage
- 5.2 Family life: MS index should increase for happy family life
- 5.3 Solidarity: MS index should increase if children spending time with their parents and grand parents
- 5.4 Immorality: MS index should decrease for access to immoral activities
- 5.5 Mortality: MS index should decrease for child mortality in family
- 5.6 Home: MS index should increase for mother staying at home for upbringing children
- 5.7 Time spent: MS index should increase if children spent time in *shari'ah* compliant activities
- 5.8 Respect: MS index should increase for respect of parents.
- 5.9 Religious practice for kids: MS index should increase if children memorizing part or whole Qur'an and going to Masjid.

## **2.3 Data and Methodology**

### **2.3.1 Data**

The most important aspect of developing MS index is to have indicators fully represent MS dimensions. Ideally, indicators related to MS should be developed from a questionnaire that satisfies above axioms. But practically such questionnaire is not available at the moment and we need to search for proxies that do the job. The survey data that is available on public domain and that provides somewhat relevant information is World Values Survey (WVS) data. It has many survey rounds and each round has slightly different questionnaire. The latest survey for 2010-2012 has not yet completed but it has more relevant questions than the questions asked in the available survey data for 2005-2008 and for earlier years.

The present study uses survey data for 2005-08 for Pakistan to illustrate the application of methodology used in this study. It analyses the survey questions for 2010-2012 and 2005-2008 for consistency with MS axioms.

The following table (Table 1) shows the grouping of survey questions for each MS dimension such that the association between indicators within each dimension is theoretically strong. We list the variables related to a dimension given in the latest WVS. Table 2 gives MS dimensions with indicators for WVS 2010-2012. A comparison of these two tables shows that WVS 2010-12 is more close to the axioms:

**Table 1: Maqasid al-Shari'ah Dimensions and their indicators in WVS 2010-2012**

Dimension	Variable	Indicator hint (see full question in the survey)
FATIH	V145	attendance in religious services
	V146	frequency in prayer
	V147	religious, non-religious or atheist person
	V148	belief in God
LIFE	V55	freedom of choice in life
	V177	preferred not to go out at night
	V179	victim of crime last year
	V180	immediate family victim of crime last year
	V183	a war involving my country
	V184	a terrorist attack
	V185	a civil war
	V188	gone without enough food to eat
	V189	felt unsafe from crime in your home
INTELLECT	V182	not being able to give my children a good education
	V248	highest level of education
	V172	alcohol consumption in streets
	V175	drug sale in streets
POSTERITY	V203	Homosexuality: justifiable
	V203A	Prostitution:
	V204	Abortion:
	V205	Divorce:
	V206	sex before marriage:
	V209	parents beating children:
PROPERTY	V59	satisfaction with financial situation
	V171	occurrence of robberies
	V181	worry about losing job or not finding a job
	V239	which income group you belong to

**Table 2: Maqasid al-Shariah Dimensions and their indicators in WVS 2005-08**

MS DIMENSION	WVS 2005-2008	SURVEY QUESTIONS HINTS
	VARIABLE REF.	
<b>FAITH</b>		
<b>faith1</b>	a006	importance in life: religion
<b>faith2</b>	f028	how often you attend religious services
<b>LIFE</b>		
<b>life1</b>	a009	state of health
<b>life2</b>	a170	satisfaction with your life
<b>INTELLECT</b>		
<b>intellect1</b>	d071	traits in women: women educated
<b>intellect2</b>	f124	justifiable: drinking alcohol
<b>intellect3</b>	x025	highest education level attained
<b>POSTERITY</b>		
<b>post1</b>	a001	importance in life: family
<b>post2</b>	d019	a woman has to have children to be fulfilled
<b>post3</b>	f118	justifiable: homosexuality
<b>post4</b>	f119	prostitution
<b>post5</b>	f120	abortion
<b>post6</b>	f121	divorce
<b>PROPERTY</b>		
<b>prop1</b>	c006	satisfaction with financial situation of household
<b>prop2</b>	x047	scales of income
<b>prop3</b>	x047r	income level

### 2.3.2 Methodology

The AF methodology proposes a family of multidimensional measures by extending the unidimensional Foster-Greer-Thorbecke (FGT) poverty measures. Among these measures, the adjusted headcount index (Mo) is an appropriate choice where survey responses are ordinal in nature. The calculation of Mo in a sequence of 12 steps is given in Alkire and Foster (2007)<sup>7</sup> whereas in terms of mathematical notations and structure, it is given in Alkire and Foster (2011). In what follows, we summarize 12 steps to calculate Mo:

Step-1: Choose unit of analysis

Step-2: Choose dimensions

Step-3: Choose indicators

Step-4: Set poverty lines (first cutoff)

Step-5: Apply poverty lines

Step-6: Count the deprivations for each person

Step-7: Set the second cutoff

Step-8: Apply second cutoff (k) to obtain the set of poor persons and censor all nonpoor data

Step-9: Calculate the headcount (H)

$$H = \frac{q}{n}$$

Where  $q$  is the number of people who are multidimensionally poor, and  $n$  is the total population.

Step-10: Calculate the average poverty gap (A)

$$A = \frac{\sum_1^q c}{q}$$

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<sup>7</sup> Initially issued as Alkire, Sabina and James Foster (2007) Counting and Multidimensional Poverty Measurement. OPHI Working Paper No. 7. Oxford, University of Oxford. Further revised in 2009 as OPHI Working Paper No. 7.5. [http://www.ophi.org.uk/wp-content/uploads/OPHI\\_WP7-5.pdf](http://www.ophi.org.uk/wp-content/uploads/OPHI_WP7-5.pdf). Later published as Alkire, Sabina and James Foster (2011) in *Journal of Public Economics*.



Where  $c$  is the deprivation score of a multidimensionally poor and is obtained by adding the deprivation score in each dimension. If a poor person is deprived in three dimensions then his score is obtained as follows:  $c = c_1 + c_2 + c_3$ .

Step-11: Calculate the adjusted headcount ( $M_0$ )

$$M_0 = H \cdot A$$

Step-12: Decompose by group and breakdown by dimension

$$Contrib_j = \frac{(\sum_1^q c_j)/n}{M_0}$$

It shows contribution of dimension  $j$  to multidimensional poverty.

The range of each dimension is computed by summing up the minimum and maximum values of its indicators, measured on Likert scales, and its cut-off value or deprivation threshold using general perception in an Islamic society. The summation of indicator values is justified for dimensional unity and reduces random measurement error in each indicator.

Following the methodology given above, we develop a distribution matrix that shows values of each dimension received by each individual. Then we count the number of persons falling below cut-off in each dimension and represent it by a deprivation matrix and add deprivations count in all dimensions by a vector of deprivation count assuming equal weights.

We apply second cut-off to number of dimensions to check how many individuals are considered poor given the number of dimensions. Initially we assume that any person deprive in more than two dimensions ( $k = 2$ ) is considered poor in Maqasid al-Shar'iah (MS). Applying the second cut-off generates censored deprivation matrix and censored vector of deprivation count.

Using FGT poverty measures in multi-dimensions, we compute MS shortfall headcount index ( $H$ ), MS shortfall intensity index ( $A$ ), and MS shortfall headcount adjusted index ( $M_0$ ). The contribution of each dimension in overall MS shortfall is also computed. All of these indices help policy makers to concentrate on areas of improvement in terms of formulation and effective implementation of economic, social and public policies in these areas.

### SECTION III

#### 3.1 Application: a case of Pakistan

The latest World Values Survey has many questions related to MS, as noted above, but it has not been completed yet. Therefore, the study uses WVS 2005-2008 for Pakistan with a sample size of 2000 individuals to illustrate the application of AF methodology. The WVS 2005-2008 has many questions not directly related to each dimension of MS. Given the limitation, this survey provides a proxy for each dimension. Nevertheless, the study illustrates how the counting approach could be applied using a survey data.

The following table shows grouping of indicators according to their closeness with a dimension using individual as a unit of analysis.

Table 3 shows MS dimensions and their minimum and maximum values. The poverty line or first cutoff is determined according to the common belief of an Islamic society.

**Table 3: Maqasid al-Shari'ah Dimensions and their indicators with deprivation cut-offs**

	WVS 2005- 2008			DEPRIV ATION
MS DIMENSION with deprivation criterion	VARIABLE REF.	MIN VALUE	MAX VALU E	CUT- OFF POINT
<b>FAITH</b>				
<b>faith1</b>	a006	1	4	3
<b>faith2</b>	f028	1	6	4
		2	10	7
<i>ANY ONE HAVING SCORE BELOW 7 CONSIDERD POOR IN FAITH DIMENSION</i>				
<b>LIFE</b>				
<b>life1</b>	a009	1	4	2
<b>life2</b>	a170	1	9	5
		2	13	7
<i>ANY ONE HAVING SCORE BELOW 7 CONSIDERD POOR IN LIFE DIMENSION</i>				

<b>INTELLECT</b>				
<b>intellect1</b>	d071	1	5	3
<b>intellect2</b>	f124	1	9	7
<b>intellect3</b>	x025	1	8	5
		3	22	<b>15</b>
<i>ANY ONE HAVING SCORE BELOW 15 CONSIDERD POOR IN INTELECT DIMENSION</i>				
<b>POSTERITY</b>				
<b>post1</b>	a001	1	4	3
<b>post2</b>	d019	0	1	1
<b>post3</b>	f118	1	4	4
<b>post4</b>	f119	1	8	8
<b>post5</b>	f120	1	10	8
<b>post6</b>	f121	1	9	6
		5	36	<b>30</b>
<i>ANY ONE HAVING SCORE BELOW 30 CONSIDERD POOR IN POSTERITY DIMENSION</i>				
<b>PROPERTY</b>				
<b>prop1</b>	c006	1	9	5
<b>prop2</b>	x047	1	10	5
<b>prop3</b>	x047r	1	3	2
		3	22	<b>12</b>
<i>ANY ONE HAVING SCORE BELOW 12 CONSIDERD POOR IN PROPERTY DIMENSION</i>				

### 3.2 Results and Discussion

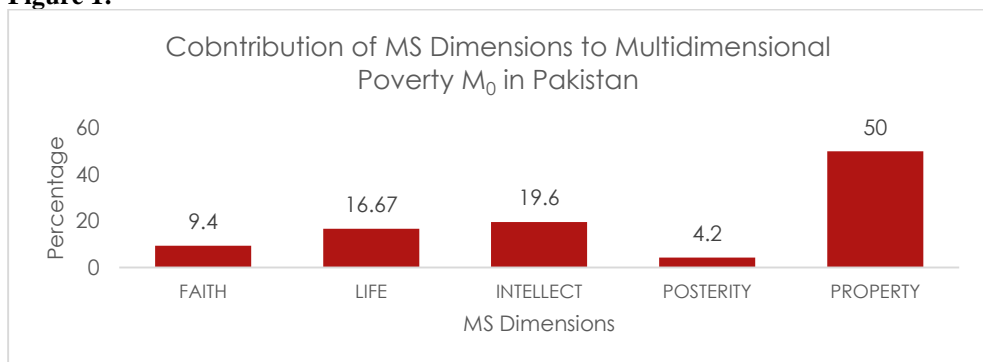
Following the AF methodology, the headcount index (H) is 39% which indicates incidence of poverty in the sense of falling short from a desirable level in Maqasid Shariah. In the present example, it means 39% of the sample population is poor in more than two dimensions. The intensity of poverty is calculated by average deprivation (A) which turns out to be 31%. That means the average poor person is deprived in 31% of the dimensions. The Mo which shows multidimensional poverty

in MS in the present context is calculated by multiplying H and A. that is, the headcount (H) is adjusted for intensity (A). Surprisingly, it is as low as 12% since intensity is low as compared to incidence of poverty. The following table shows contribution of each dimension in overall poverty Mo:

**Table 4: Shows contribution of each dimension to overall shortfall/deprivation/poverty (Mo)**

DIMENSION	CONTRIBUTION (%)
FATIH	9.40
LIFE	16.67
INTELLECT	19.60
POSTERITY	4.20
PROPERTY	50.00
OVERALL	100

**Figure 1:**



The lowest contribution in Mo is posterity whereas the highest contribution in Mo is property. That is, protection of material wealth is below the minimum desired threshold and it is contributing about 50% for keeping people below the multidimensional MS-based poverty. While the lowest contributor to the overall shortfall in achieving Maqasid al-Sharia based progress is from posterity protection dimension. Based on this analysis, an immediate policy direction for Pakistan is to focus attention on improving the safety and security of wealth of the poor and weak and improving the law and order situation.

In this example we have worked only with a lower bound (a minimum), being above it is desirable for the society. However, there are situations where excesses are also bad and in contravention of the objectives of Shariah. The counting approach can be modified to take care of both limits. In case of consumption for example, the number

of people below a threshold level of consumption indicates a shortfall from the socially desired level using Maqasid al-Shariah perspective. Similarly, number of people involved in excessive consumption (*ifrat*) from the norm (e.g. becoming obese) or when there exists sever poverty are also not desirable. A confirming set or compliant set between these two extremes can be created and its members counted to create a development indicator.

### 3.3 Comparison with Other Estimates

Comparing the Multidimensional Poverty using Maqasid al-Shariah based- Index (MS-Index) with the MPI measure calculated for Pakistan by the OPHI and UNDP, we find that Pakistan fared better in MS based-Index  $M_0$ , as well as in the incidence (H) and average intensity (A) of poverty. Though, strictly speaking, the two measures are not comparable due to differences in their definition of dimensions, deprivation threshold cut-offs, and the survey data. The MS-based approach used more dimensions and higher thresholds for deprivation cut-off than the OPHI-UNDP index, yet the poverty numbers are lower. This indicates better socio-economic conditions in the Maqasid al-Shariah dimensions.

Comparing the MS-based poverty with the usual income poverty we can say that there are more poor people in terms of MS-based poverty in Pakistan (H= 39%) than income-poor who fall behind \$1.25 a day (22.6%).

**Table-5: Comparison of MS-based poverty index with other poverty indexes**

Calculation Method	Survey	Year	Multidimensional Poverty Index (MPI = H × A)	Incidence of Poverty (H)	Average Intensity Across the Poor (A)
MS based I	WVS	2008	0.12	39.0 %	31.0 %
OPHI and UNDP	DHS	2007	0.264 †	49.4 % †	53.4 % †
Percentage of Income Poor (\$1.25 a day)	HIES	2006		22.6 % ††	
Percentage of Income Poor (\$2.00 a day)	HIES	2006		61.0 % ††	
Percentage of Poor (National Poverty Line)	HIES	2006		22.3 % ††	

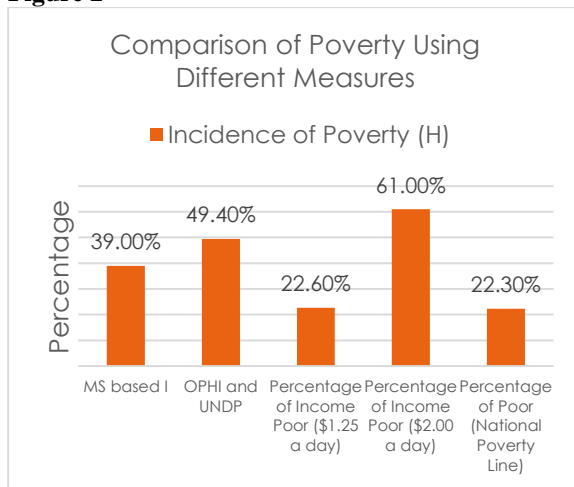
Notes: †

† OPHI (2011) Country Briefing: Multidimensional Poverty Index (MPI) At a Glance

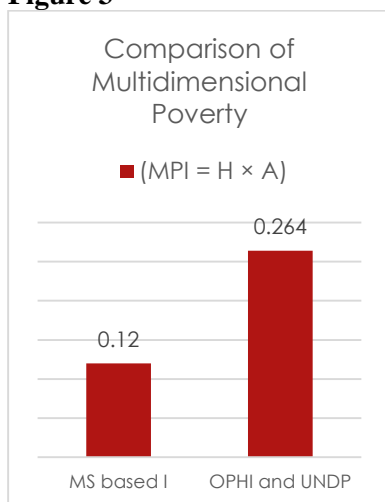
†† The World Bank (2011). "World Development Indicators." Washington, DC.

These differences are easy to visualize in the following two figures. We also note that in general, a Maqasid al-Shariah based-Index can be different from an income-based index or the other multidimensional indexes. However, in the present case the difference is also because of the nature of data. We have used a combination of opinion and facts survey as opposed to only facts survey that are generally used in the other measures.

**Figure 2**



**Figure 3**



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